FORM 3

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

AMENDED REPORT ☑

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
Woodward 4-14C4HZ

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

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 ○ INDIAN ○ STATE ○ FEE ◉

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

13. NAME OF SURFACE OWNER (if box 12 = 'fee')
Caroline Beth Woodward

14. SURFACE OWNER PHONE (if box 12 = 'fee')
801-225-6468

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')
1087 North 200 East, Orem, UT 84057

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ○ (Submit Commingling Application) NO ◉

19. SLANT
VERTICAL ○ DIRECTIONAL ○ HORIZONTAL ◉

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	275 FNL 2315 FWL	NENW	14	3.0 S	4.0 W	U
Top of Uppermost Producing Zone	665 FNL 2400 FWL	NENW	14	3.0 S	4.0 W	U
At Total Depth	680 FSL 1995 FEL	NWSE	14	3.0 S	4.0 W	U

21. COUNTY
DUCHESNE

22. DISTANCE TO NEAREST LEASE LINE (Feet)
275

23. NUMBER OF ACRES IN DRILLING UNIT
640

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
2400

26. PROPOSED DEPTH
MD: 14480 TVD: 10030

27. ELEVATION - GROUND LEVEL
5973

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	20	13.375	0 - 750	54.5	J-55 ST&C	8.8	Class G	1606	1.15	15.8
SURF	12.25	9.625	0 - 2500	40.0	N-80 LT&C	9.5	Unknown	303	3.16	11.0
							Unknown	195	1.3	14.3
I1	8.75	7	0 - 9408	29.0	HCP-110 LT&C	10.6	Unknown	449	2.35	12.0
							Unknown	91	1.92	12.5
L1	6.125	5	9208 - 14480	13.5	HCP-110 LT&C	13.4	Unknown	443	1.4	14.5

ATTACHMENTS

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

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

NAME Maria S. Gomez	**TITLE** Principal Regulatory Analyst	**PHONE** 713 997-5038
SIGNATURE	**DATE** 10/11/2013	**EMAIL** maria.gomez@epenergy.com

API NUMBER ASSIGNED 43013525520000 **APPROVAL**

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Woodward 4-14C4HZ
Sec. 14, T3S, R4W
DUCHESNE COUNTY, UT

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. **Estimated Tops of Important Geologic Markers**

Formation	Depth
Green River	4,403' TVD
Mahogany Bench	6,042' TVD
L. Green River	6,158' TVD
Wasatch (TU2)	9,205' TVD
Uteland Butte	9,539' TVD
Base Uteland Butte	9,644' TVD
Wasatch CR3	10,197' TVD
Base Wasatch CR3	10,217' TVD
Lateral T.D. (Permit)	10,030' TVD / 15,000' MD

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

Substance	Formation	Depth
Water	MSGW	1,497' TVD
	Green River	4,403' TVD
	Mahogany Bench	6,042' TVD
Oil	L. Green River	6,158' TVD
Oil	Wasatch (TU2)	9,205' TVD
Oil	Uteland Butte	9,539' TVD
Oil	Base Uteland Butte	9,644' TVD
Oil	Wasatch CR3	10,197' TVD
Oil	Base Wasatch CR3	10,217' TVD

3. **Pressure Control Equipment:** (Schematic Attached)

A 5.0" by 20.0" rotating head on structural pipe from surface to 750' MD/TVD. A 5.0" by 13-3/8" Smith Rotating Head from 750' MD/TVD to 2,500' MD/TVD on Conductor. A 5M BOP stack, 5M kill lines and choke manifold used from 2,500' MD/TVD to 9,408' MD/ 9,405' TVD. A 10M BOE w/ rotating head, 5M annular, blind rams & mud cross from 9,408' MD/ 9,405' TVD to TD.

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

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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 nippled 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 3-½" pipe rams, blind rams, mud cross and rotating head from intermediate 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:
Patterson Rig # 307 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 750' - TD
B) Mud logger with gas monitor – 2,500' 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.

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5. **Drilling Fluids Program:**

Proposed Mud Program:

Interval	Type	Mud Weight
Surface	WBM	8.8 – 9.5
Intermediate	WBM	9.5 – 10.6
Production	OBM or WBM	10.6 – 13.4

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: 2,500' 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 10,030' TVD equals approximately 6,989 psi. This is calculated based on a 0.6968 psi/ft gradient (13.4 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 4,782 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 9,405' TVD = 7,524 psi

BOPE and casing design will be based on the lesser of the two MASPs which is 4,782 psi.

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

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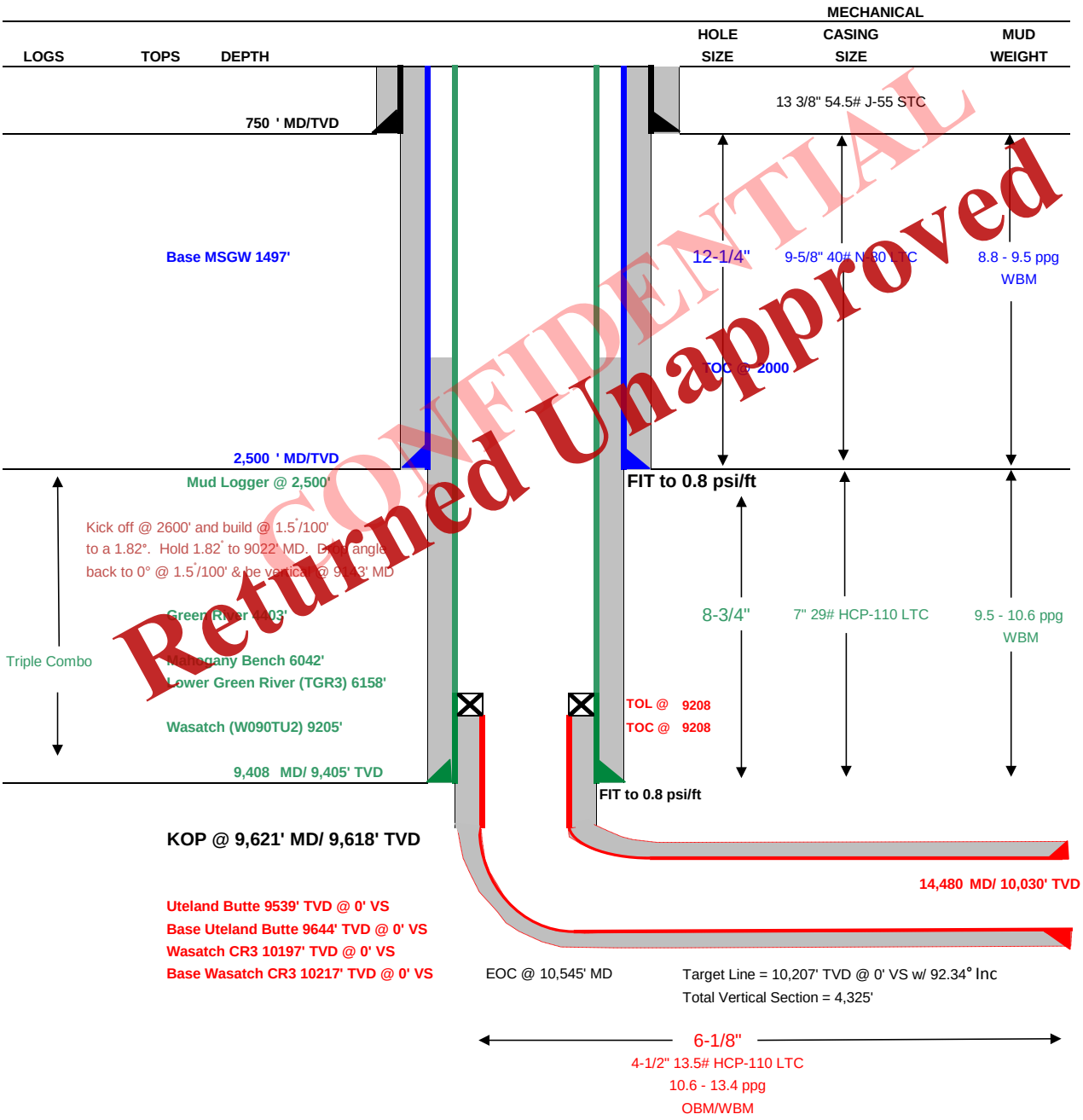
EP ENERGY

Drilling Schematic

Company Name:	EP ENERGY	**Date:**	October 3, 2013
Well Name:	Woodward 4-14C4HZ	**TD:**	14,480
Field, County, State:	Altamont, Duchesne, Utah	**AFE #:**	161037
Surface Location:	Sec 14 T3S R4W 275' FNL 2315' FWL	**BHL:**	660' FSL 2500' FEL
Objective Zone(s):	Wasatch CR3	**Elevation:**	5973
Rig:	Patterson 307	**Spud (est.):**	TBD

BOPE Info: 5.0 x 13 3/8 rotating head from 750' to 2,500' 11 5M BOP stack and 5M kill lines and choke manifold used from 2,500' to 9,408' 11 10M BOE w/rotating head, 5M annular, 5 rams, blind rams & mud cross from 9,408' to TD



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DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	750	54.5	J-55	STC	2,740	1,130	514
SURFACE	9-5/8"	0	2500	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0	9408	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	4-1/2"	9208	14480	13.50	HCP-110	LTC	12,420	11,810	338

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		750	Class G + 3% CACL2	1606	100%	15.8 ppg	1.15
SURFACE	Lead	2,000	EXTENDACEM (TM) SYSTEM: 5 lbm/sk Silicalite Compacted + 0.25 lbm/sk Kwik Seal + 0.125 lbm/sk Poly-E-Flake + 2% Bentonite	303	75%	11.0 ppg	3.16
	Tail	500	HALCEM (TM) SYSTEM: 3 lbm/sk Silicalite Compacted + 1% Salt + 0.3% Econolite + 0.25 lbm/sk Poly-E-Flake + 0.25 lbm/sk Kwik Seal + 0.5% HR-5	195	50%	14.3 ppg	30
INTERMEDIATE	Lead	6,408	EXTENDACEM (TM) SYSTEM: 4% Bentonite + 0.2% Econolite + 0.2% Halad-322 + 3 lbm/sk Silicalite Compacted + 0.9% HR-5 + 0.125 lbm/sk Poly-E-Flake + 0.1% SA-1015 + 5 lbm/sk Kol-Seal + 1 lbm/sk Granulite TR 1/4	449	10%	12.0 ppg	2.35
	Tail	1,000	EXPANDACEM (TM) SYSTEM: 0.2% Econolite + 0.3% Versaset + 1.2% HR-5 + 0.3% Super CBL + 0.1% Halad(R)-322 + 0.125 lbm/sk Poly-E-Flake	91	10%	12.5 ppg	1.92
PRODUCTION LINER		5,272	EXTENDACEM (TM) SYSTEM: 0.05% SA-1015 + 0.3% Halad(R)-413 + 0.5% SCR-100 + 0.125 lbm/sk Poly-E-Flake + 3 lbm/sk Silicalite Compacted + 20% SSA-1 + 0.35% Halad-344	443	25%	14.5 ppg	1.4

FLOAT EQUIPMENT & CENTRALIZERS	
CONDUCTOR	PDC drillable guide 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 guide shoe, 1 joint casing, PDC drillable float collar & Stage collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float equipment. Maker joint at 6,100' MD.
LINER	Float shoe, 1 joint, float collar. Thread lock all FE. Maker joints @ 11,050' MD & 12,550' MD

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

MANAGER: Tommy Gaydos

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EP ENERGY E&P COMPANY, L.P.

WOODWARD 4-14C4HZ

SECTION 14, T3S, R4W, U.S.B.&M.

PROCEED NORTH ON STATE ROAD 87 FROM THE INTERSECTION OF STATE ROAD 87 WITH US HIGHWAY 40 IN DUCHESNE, UTAH APPROXIMATELY 3.54 MILES TO AN INTERSECTION;

TURN RIGHT AND TRAVEL EASTERLY ON A COUNTY B ROAD 3.87 MILES TO AN INTERSEECTION;

CONTINUE EASTERLY ON A GRAVEL ROAD 1.15 MILES TO AN INTERSECTION;

TURN LEFT AND TRAVEL NORTHEASTERLY THEN NORTHWESTERLY ON A GRAVEL ROAD 0.78 MILES TO THE BEGINNING OF THE ACCESS ROAD;

TURN LEFT AND FOLLOW ROAD FLAGS NORTHWESTERLY 0.44 MILES TO THE PROPOSED LOCATION;

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 9.61 MILES.

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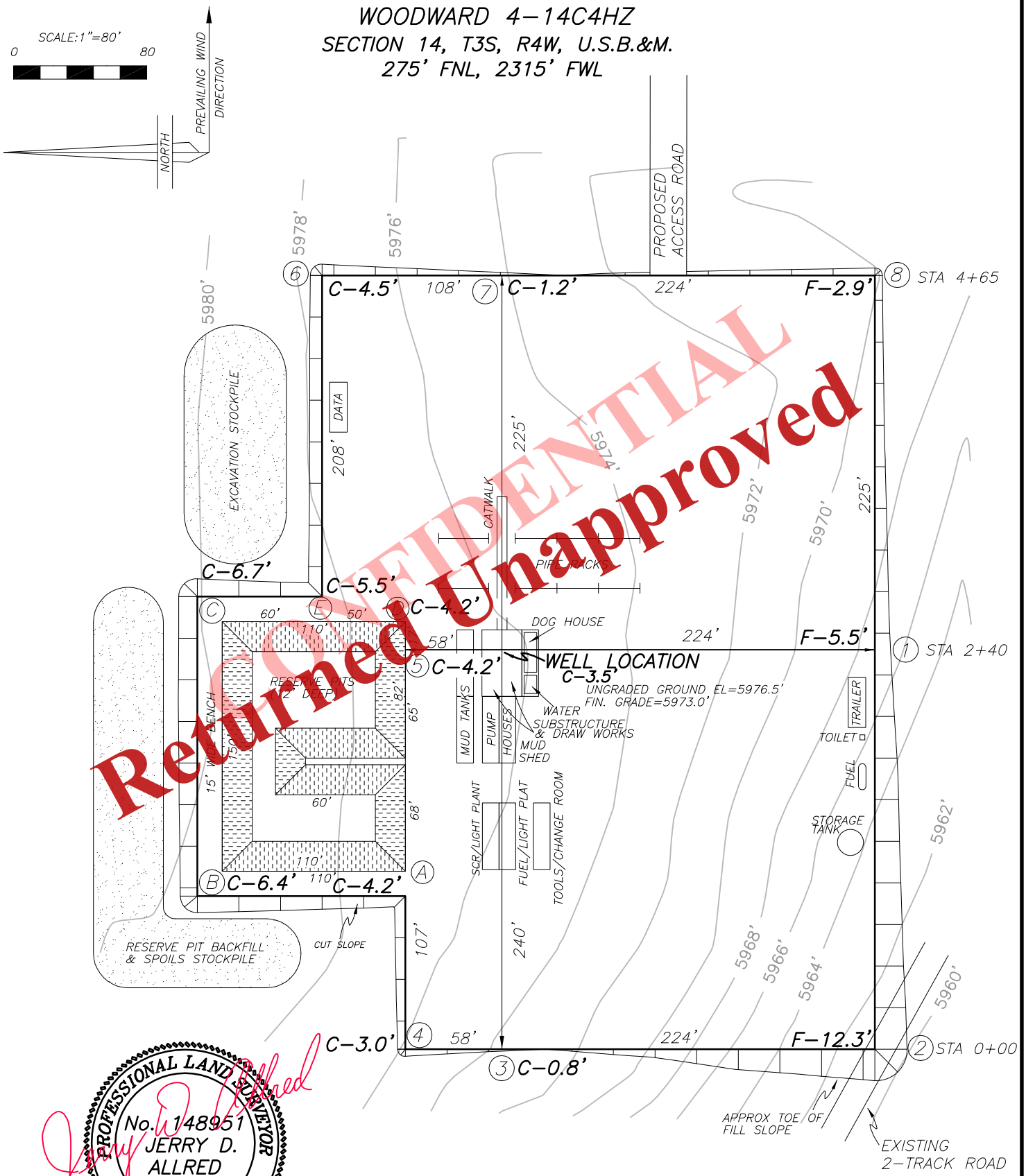
EP ENERGY E&P COMPANY, L.P.

FIGURE #1

LOCATION LAYOUT FOR
WOODWARD 4-14C4HZ
SECTION 14, T3S, R4W, U.S.B.&M.
275' FNL, 2315' FWL



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PROFESSIONAL LAND SURVEYOR
No. 148951
JERRY D.
ALLRED
27 AUG '13
STATE OF UTAH

Jerry D. Allred

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

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EP ENERGY E&P COMPANY, L.P.

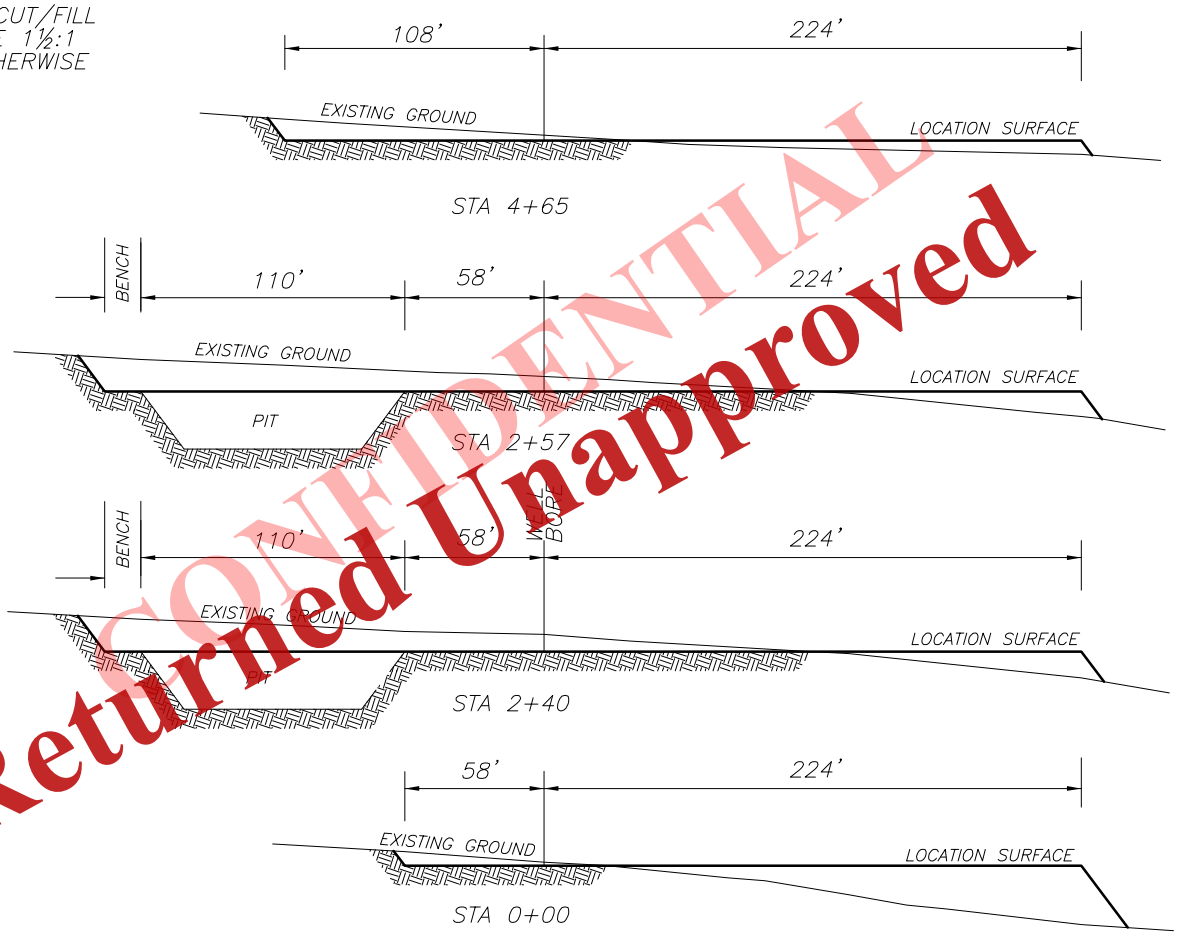
FIGURE #2

LOCATION LAYOUT FOR
WOODWARD 4-14C4HZ
SECTION 14, T3S, R4W, U.S.B.&M.
275' FNL, 2315' FWL

1"=40' X-SECTION SCALE

1"=80'

NOTE: ALL CUT/FILL SLOPES ARE 1½:1 UNLESS OTHERWISE NOTED



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APPROXIMATE YARDAGES

TOTAL CUT (INCLUDING PIT) = 18,289 CU. YDS.

PIT CUT	=	4955 CU. YDS.
TOPSOIL STRIPPING: (6")	=	3290 CU. YDS.
REMAINING LOCATION CUT	=	10,044 CU. YDS

TOTAL FILL = 10,044 CU. YDS.

LOCATION SURFACE GRAVEL=1653 CU. YDS. (4" DEEP)

ACCESS ROAD GRAVEL=659 CU. YDS.

PROFESSIONAL LAND SURVEYOR
No. 148951
JERRY D. ALLRED
27 AUG '13
STATE OF UTAH

Jerry D. Allred

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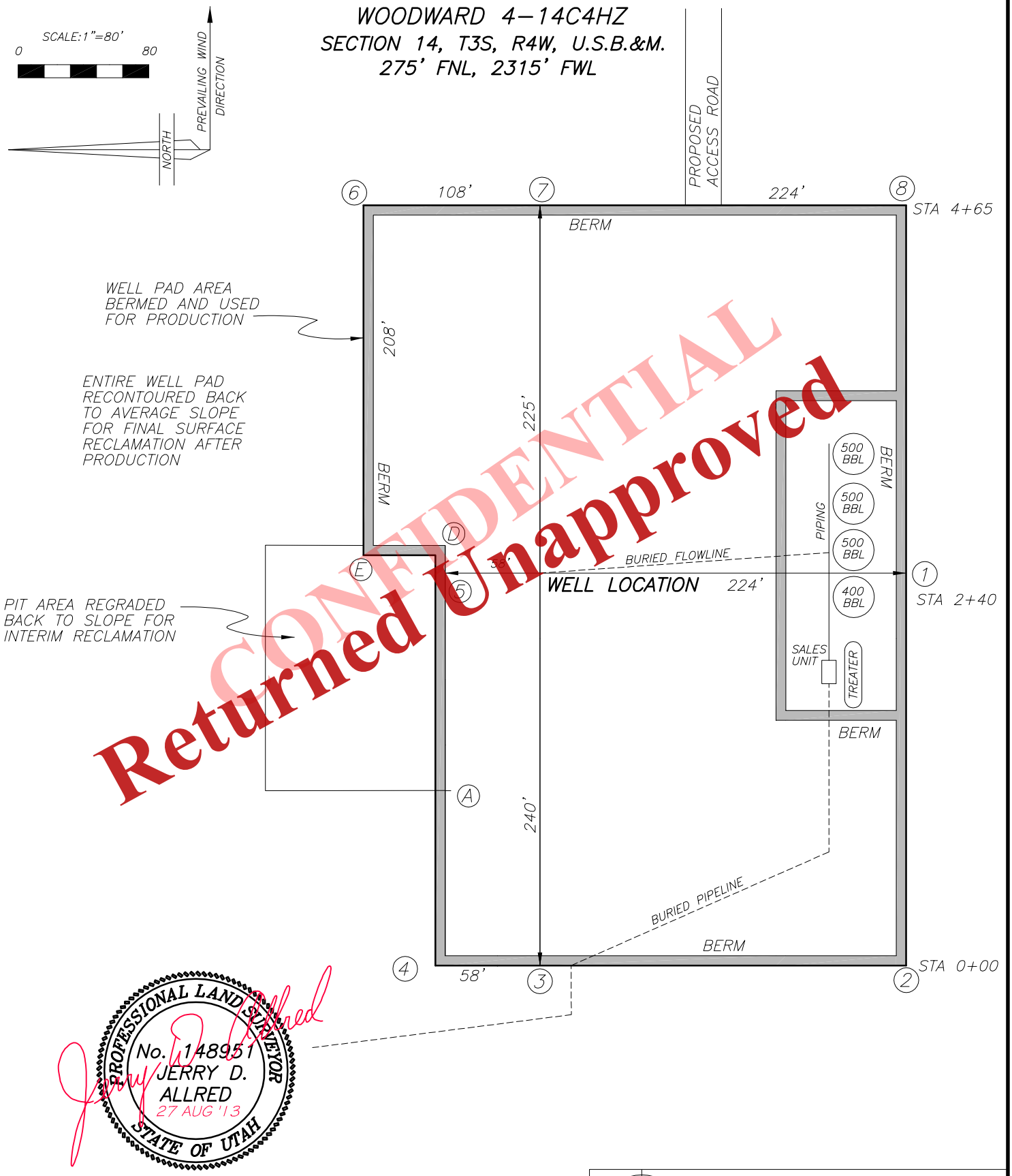
EP ENERGY E&P COMPANY, L.P.

FIGURE #3

LOCATION LAYOUT FOR WOODWARD 4-14C4HZ

SECTION 14, T3S, R4W, U.S.B.&M.
275' FNL, 2315' FWL



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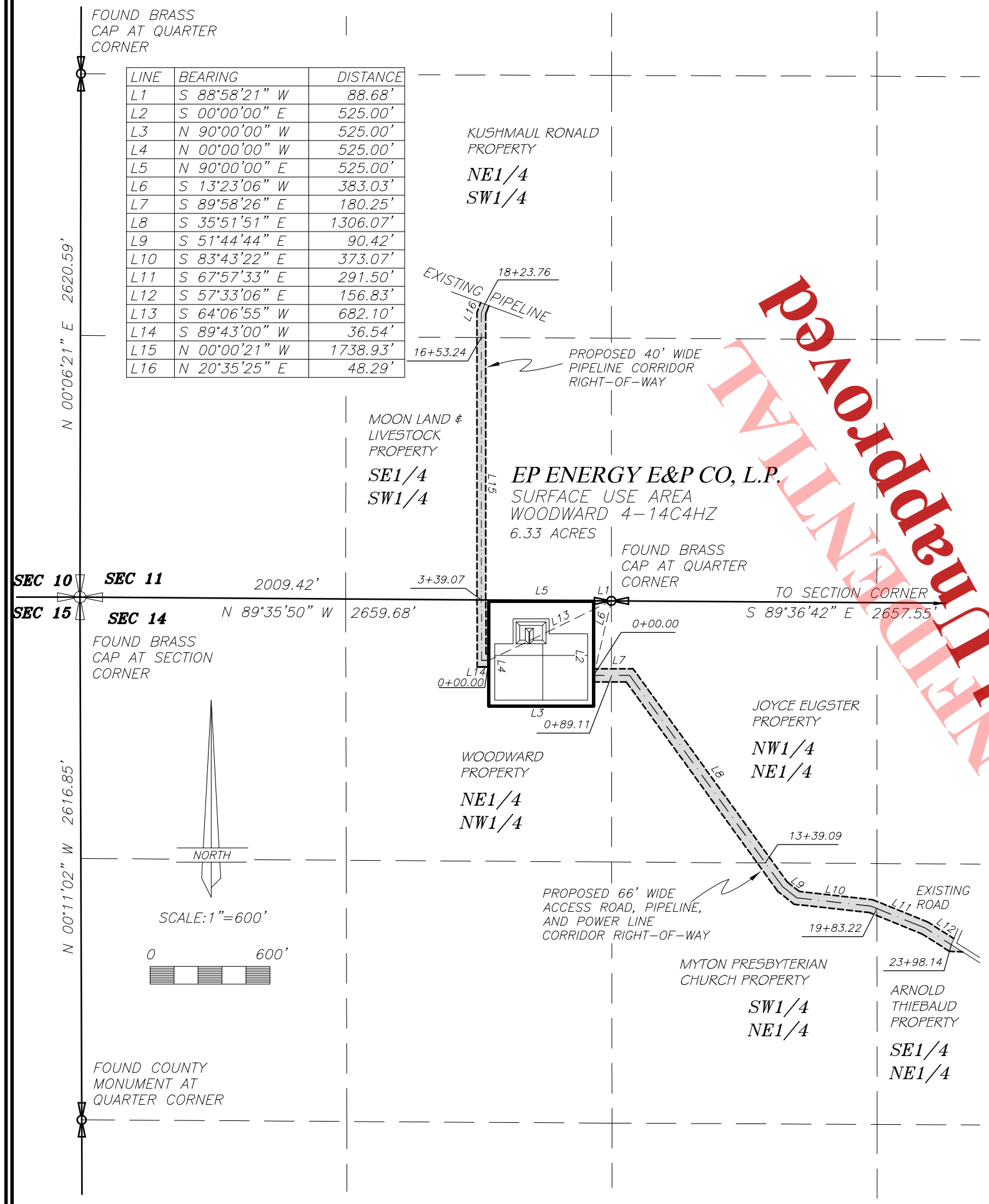
LOCATION USE AREA AND ACCESS ROAD, POWER LINE, AND PIPELINE CORRIDOR RIGHT-OF-WAY SURVEY FOR

EP ENERGY E&P COMPANY, L.P.

WOODWARD 4-14C4HZ

SECTIONS 11 AND 14, T3S, R4W, U.S.B.&M.

DUCHESNE COUNTY, UTAH



LINE	BEARING	DISTANCE
L1	S 88°58'21" W	88.68'
L2	S 00°00'00" E	525.00'
L3	N 90°00'00" W	525.00'
L4	N 00°00'00" W	525.00'
L5	N 90°00'00" E	525.00'
L6	S 13°23'06" W	383.03'
L7	S 89°58'26" E	180.25'
L8	S 35°51'51" E	1306.07'
L9	S 51°44'44" E	90.42'
L10	S 83°43'22" E	373.07'
L11	S 67°57'33" E	291.50'
L12	S 57°33'06" E	156.83'
L13	S 64°06'55" W	682.10'
L14	S 89°43'00" W	36.54'
L15	N 00°00'21" W	1738.93'
L16	N 20°35'25" E	48.29'

Unapproved
Unofficial Document

USE AREA BOUNDARY DESCRIPTION

Commencing at the North Quarter Corner of Section 14, Township 3 South, Range 4 West of the Uintah Special Base and Meridian;
Thence South 88°58'21" West 88.68 feet to the TRUE POINT OF BEGINNING;
Thence South 00°00'00" East 525.00 feet;
Thence South 90°00'00" West 525.00 feet;
Thence North 00°00'00" East 525.00 feet;
Thence North 90°00'00" West 525.00 feet to the TRUE POINT OF BEGINNING, containing 6.33 acres.

ACCESS ROAD AND POWER LINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 66 feet wide access road, pipeline, and power line corridor right-of-way over portions of Section 14, Township 3 South, Range 4 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows:
Commencing at the North Quarter Corner of Section 14, Township 3 South, Range 4 West of the Uintah Special Base and Meridian;
Thence South 13°23'06" West 383.03 feet to the TRUE POINT OF BEGINNING, said point being on the East line of the EP Energy E&P Co. Woodward 4-14C4HZ use area boundary;
Thence South 89°58'26" East 180.25 feet; Thence South 35°51'51" East 1306.07 feet;
Thence South 51°44'44" East 90.42 feet; Thence South 83°43'22" East 373.07 feet;
Thence South 67°57'33" East 291.50 feet; Thence South 57°33'06" East 156.83 feet to the West line of an existing road. Said right-of-way being 2398.14 feet in length with the side lines being shortened or elongated to intersect said use area boundary and existing road lines.

PIPELINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 40 feet wide pipeline corridor right-of-way over portions of Sections 11 and 14, Township 3 South, Range 4 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows: Commencing at the North Quarter Corner of said Section 14;
Thence South 64°06'55" West 682.10 feet to the TRUE POINT OF BEGINNING, said point being on the West line of the EP Energy E&P Co. Woodward 4-14C4HZ use area boundary;
Thence South 89°43'00" West 36.54 feet; Thence North 00°00'21" West 1738.93;
Thence North 20°35'25" East 48.29 feet to the South line of an existing pipeline. Said right-of-way being 1823.76 feet in length with the side lines being shortened or elongated to intersect said use area boundary and existing pipelines.

SURVEYOR'S CERTIFICATE

This is to certify that this plat was prepared from the field notes and electronic data collector files of an actual survey made by me, or under my personal supervision, of the use area and access road, power line, and pipeline corridor right-of-way shown hereon, and that the monuments indicated were found or set during said survey, and that this plat accurately represents said survey to the best of my knowledge.

PROFESSIONAL LAND SURVEYOR No. 148951 JERRY D. ALLRED STATE OF UTAH
27 AUG '13

JERRY D. ALLRED, REGISTERED LAND SURVEYOR, CERTIFICATE NO. 148951 (UTAH)

THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE SECTION CORNER LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

REV 27 AUG 2013
26 JUL 2013 01-128-422

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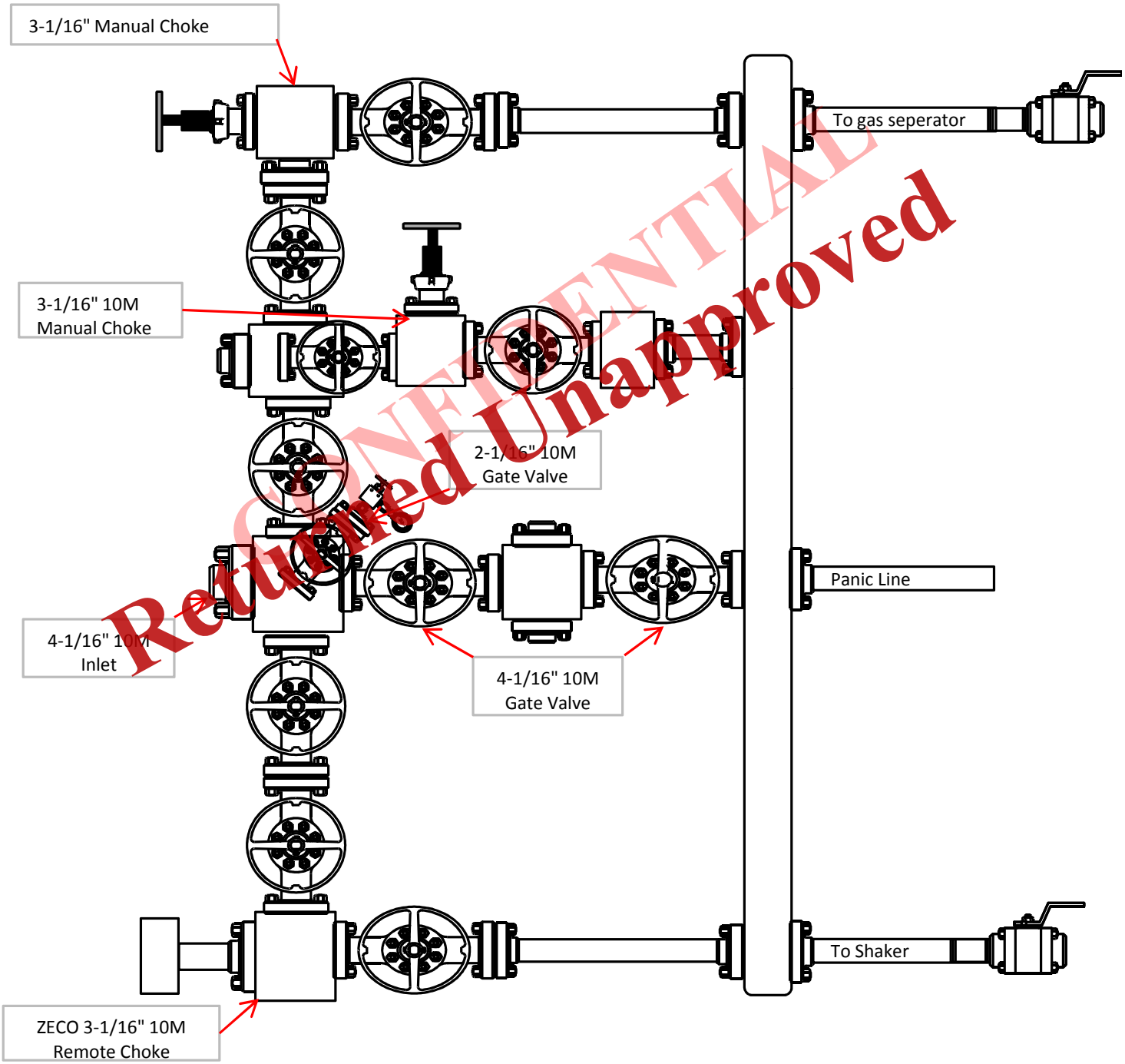
EP ENERGY

10M Choke Monifold Configuration
Well: Ute Tribal 2-14A3

All valves on the Choke Manifold are 3-1/16" 10M except for those that are identified below.



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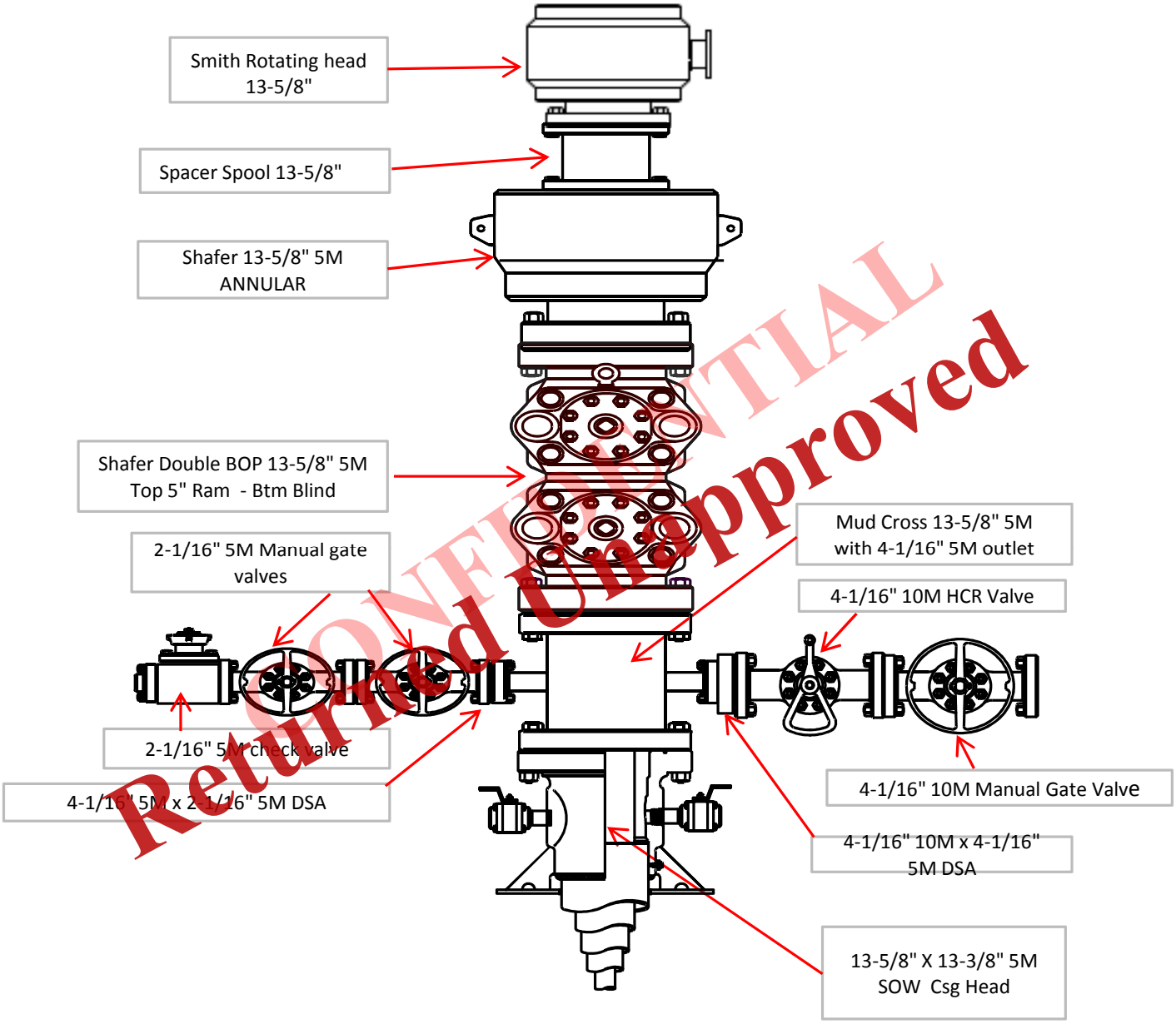
EP ENERGY

Surface 13-5/8" 5M BOP Configuration
Well: Ute Tribal 2-14A3



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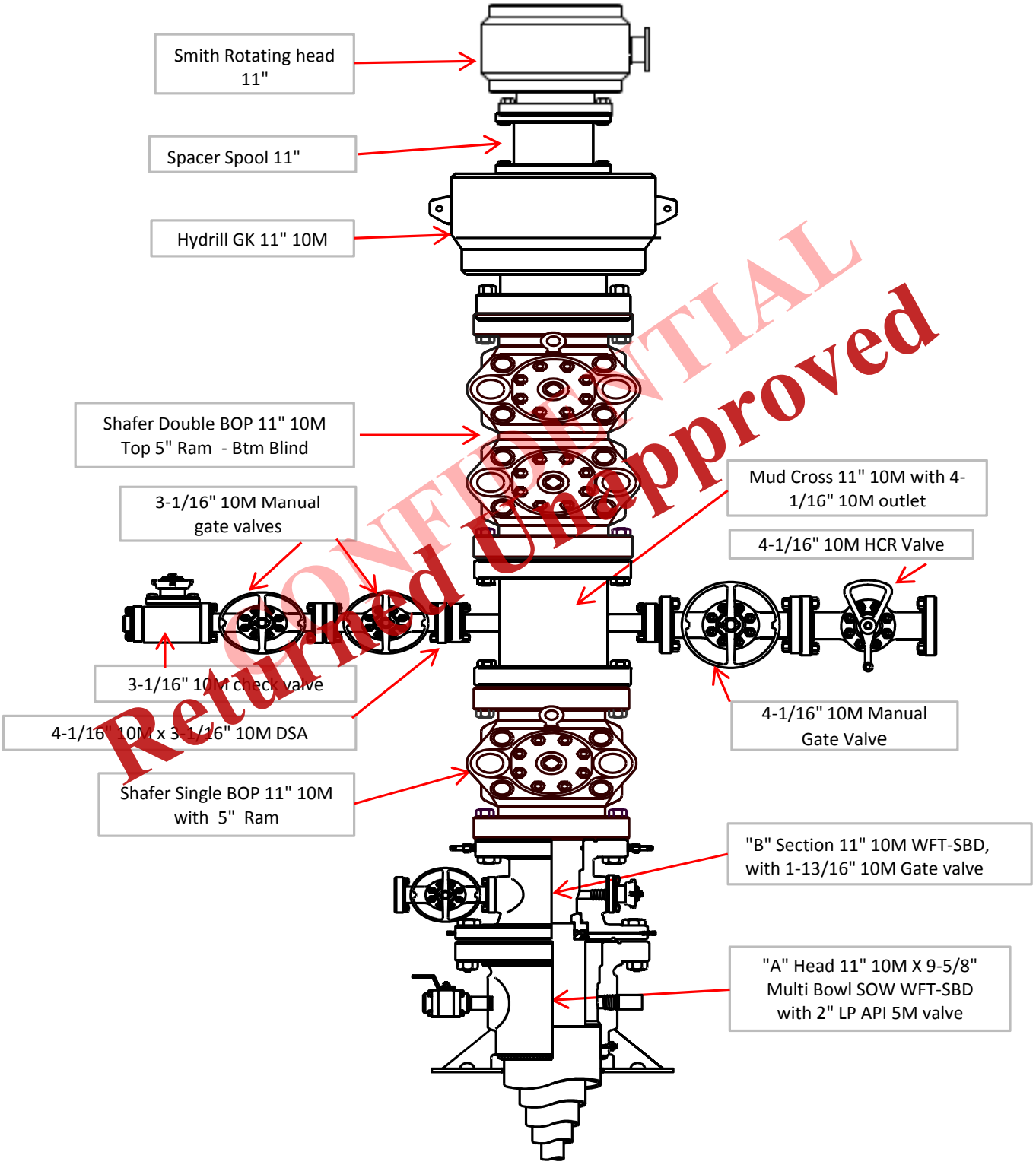
EP ENERGY

Intermediate 11" 10M BOP Configuration
Well: Ute Tribal 2-14A3



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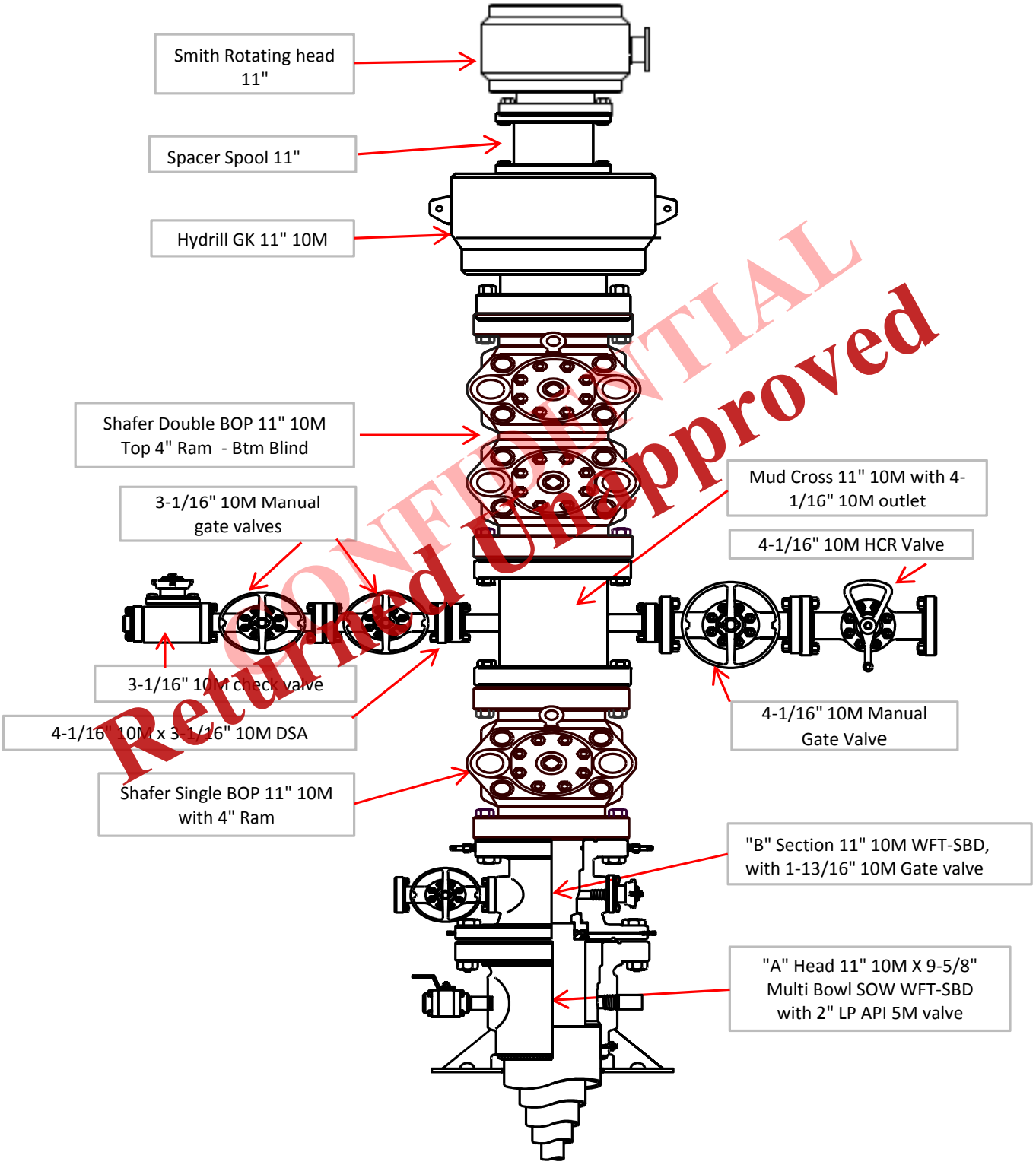
EP ENERGY

Production 11" 10M BOP Configuration
Well: Ute Tribal 2-14A3



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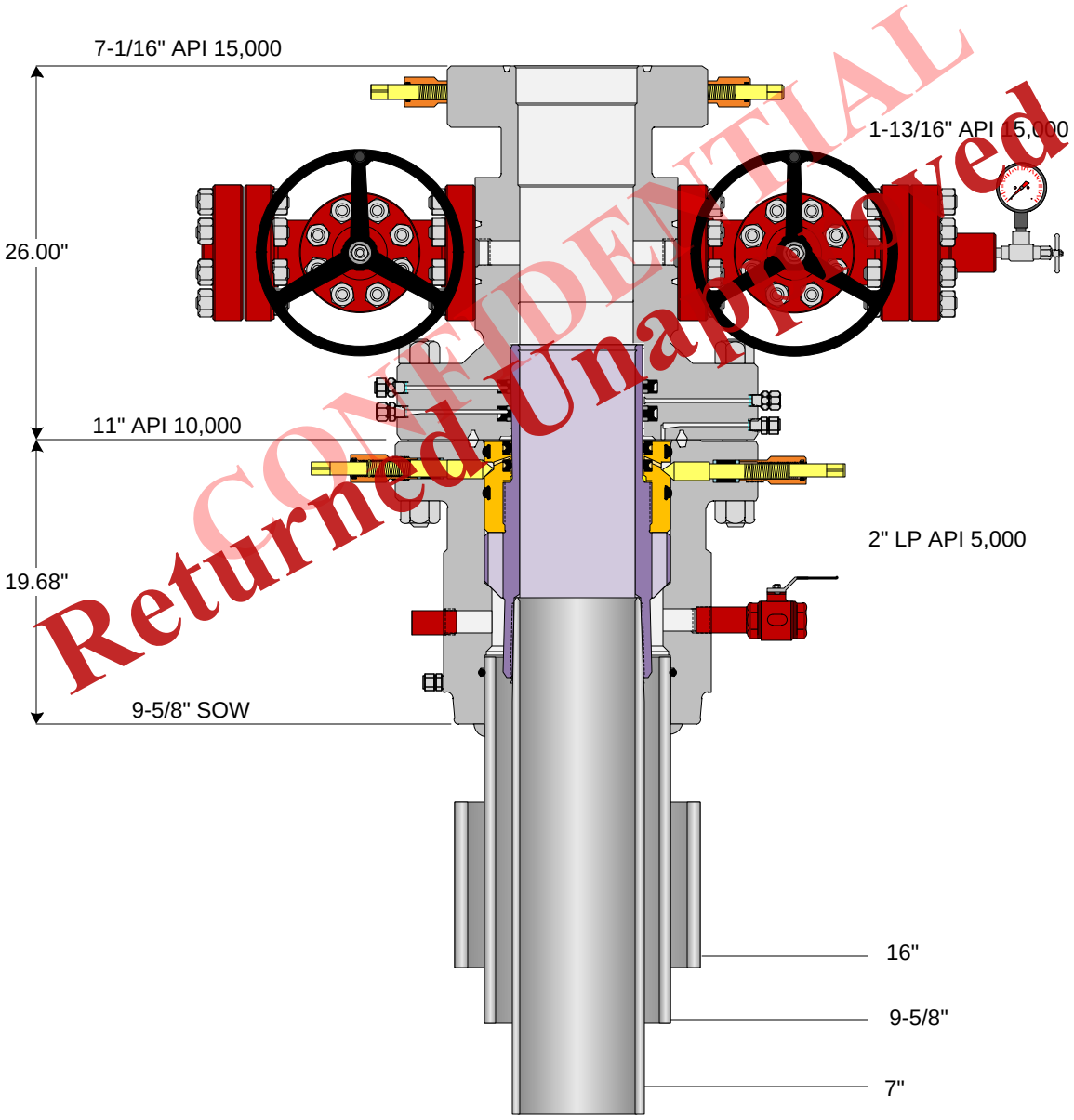
NOTE: THIS DRAWING IS NOT TO SCALE. THE DIMENSIONS REFLECTED ON THIS DRAWING ARE ESTIMATED DIMENSIONS AND ARE FOR REFERENCE ONLY.

WFT-SBD SYSTEM
PRODUCTION
PHASE



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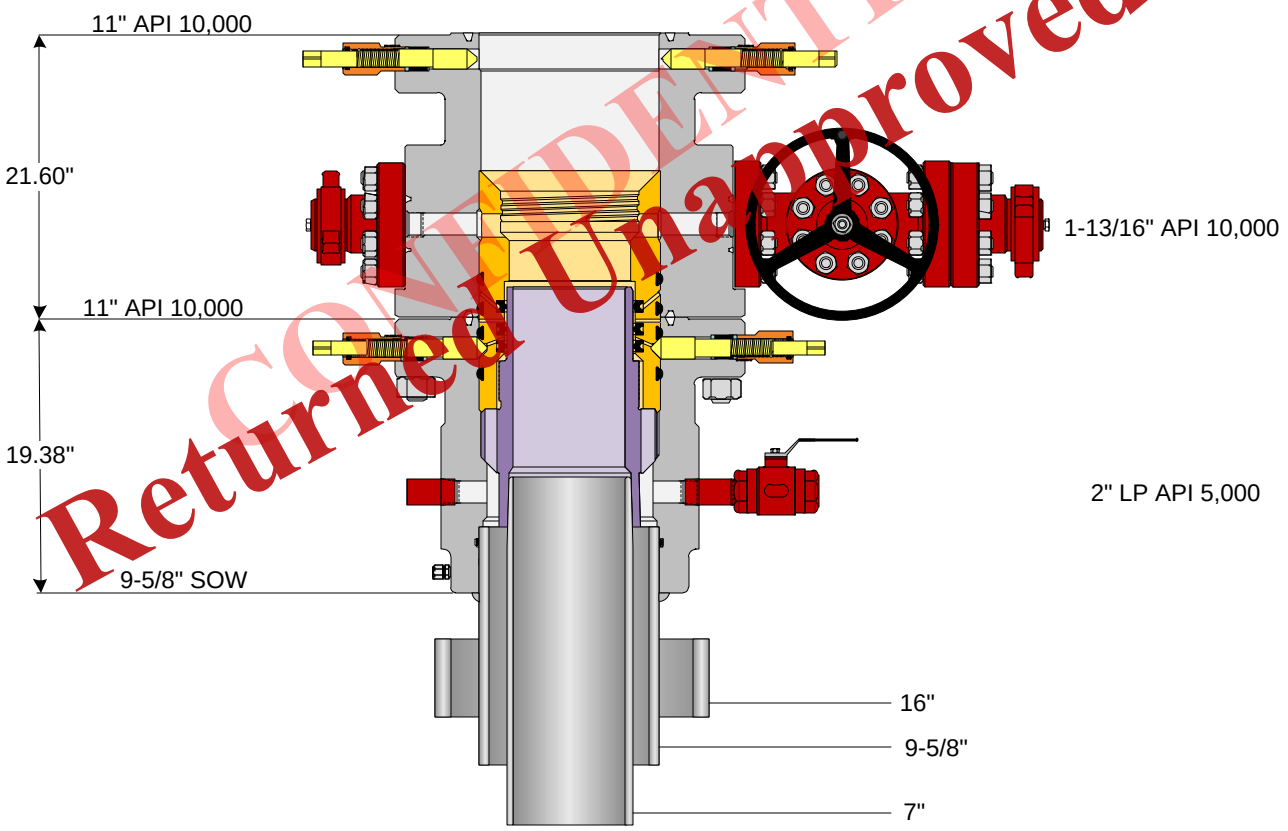
Customer:	EP ENERGY	Project No.:	75666	Quote No.:	161479
Project Name:	ALTAMONT FIELD - 11" SBD SYSTEM	Date:	02-24-2013	Drawn By:	RL

Received: October 11, 2013

NOTE: THIS DRAWING IS NOT TO SCALE. THE DIMENSIONS REFLECTED ON THIS DRAWING ARE ESTIMATED DIMENSIONS AND ARE FOR REFERENCE ONLY.

WFT-SBD SYSTEM
DRILLING PHASE



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Customer:	EP ENERGY	Project No.:	75666	Quote No.:	161479
Project Name:	UTAH PROJECT – 11 IN WFT-SBD SYSTEM	Date:	02-23-2013	Drawn By:	RL

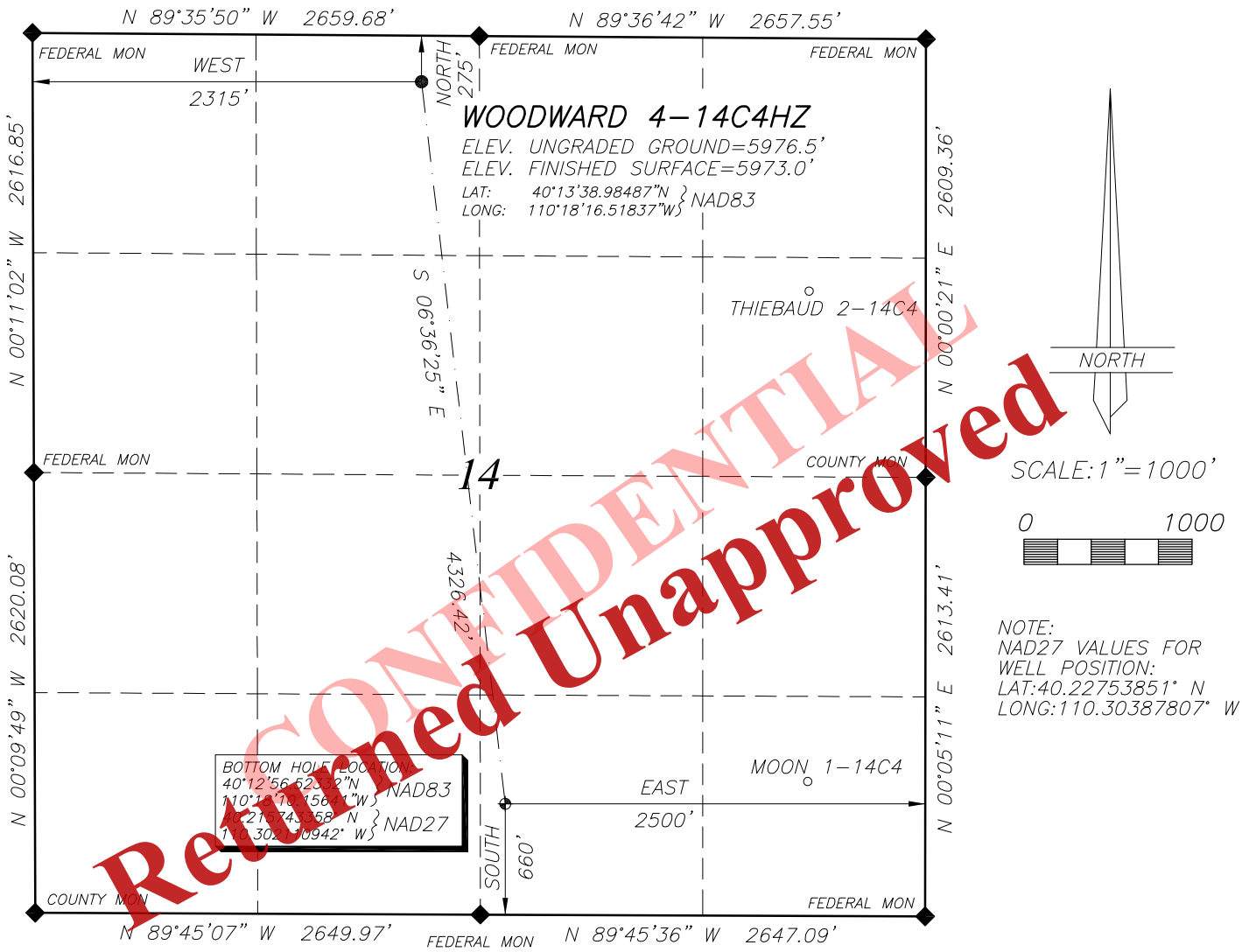
Received: October 11, 2013

EP ENERGY E&P COMPANY, L.P.

WELL LOCATION

WOODWARD 4–14C4HZ

LOCATED IN THE NE¼ OF THE NW¼ OF SECTION 14, T3S, R4W, U.S.B.&M. DUCHESNE COUNTY, UTAH



NOTE:
NAD27 VALUES FOR WELL POSITION:
LAT:40.22753851° N
LONG:110.30387807° W

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LEGEND AND NOTES

◆ CORNER MONUMENTS FOUND AND USED BY THIS SURVEY

THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS USED FOR REFERENCE AND CALCULATIONS AS WAS THE U.S.G.S. MAP

THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT A SECTION CORNER LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

BASIS OF ELEVATIONS: NAVD 88 DATUM USING THE UTAH REFERENCE NETWORK CONTROL SYSTEM

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM THE FIELD NOTES AND ELECTRONIC DATA COLLECTOR FILES OF AN ACTUAL SURVEY PERFORMED BY ME, OR UNDER MY PERSONAL SUPERVISION, DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR REESTABLISHED.

PROFESSIONAL LAND SURVEYOR
No. 148951
JERRY D. ALLRED
27 AUG 2013
STATE OF UTAH

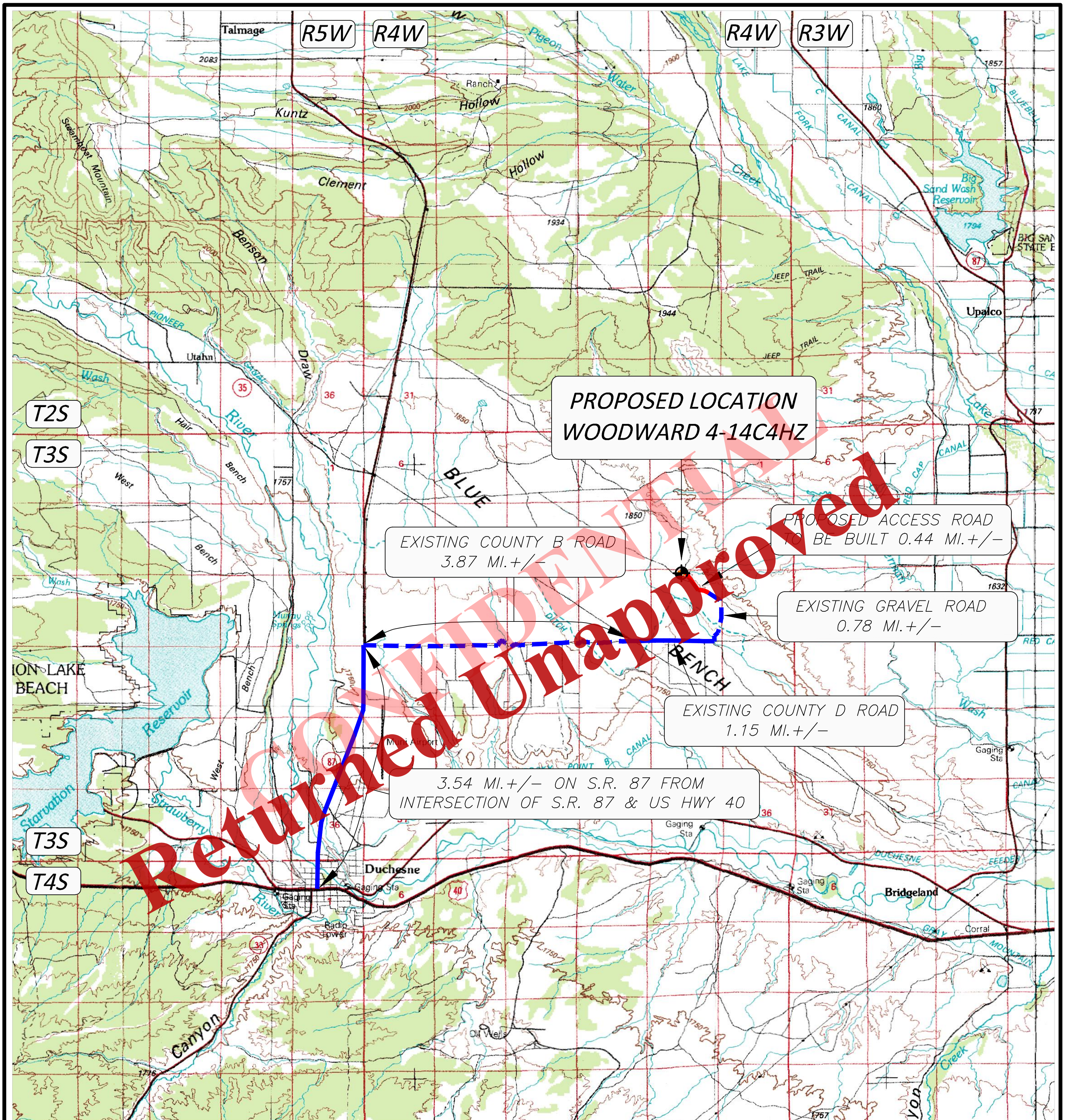
Jerry D. Allred

JERRY D. ALLRED, REGISTERED LAND SURVEYOR, CERTIFICATE NO. 148951 (UTAH)

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST––P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738–5352

REV 27 AUG 2013 01–128–422

Received: October 11, 2013



LEGEND:

PROPOSED WELL LOCATION

01-128-422

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

NORTH

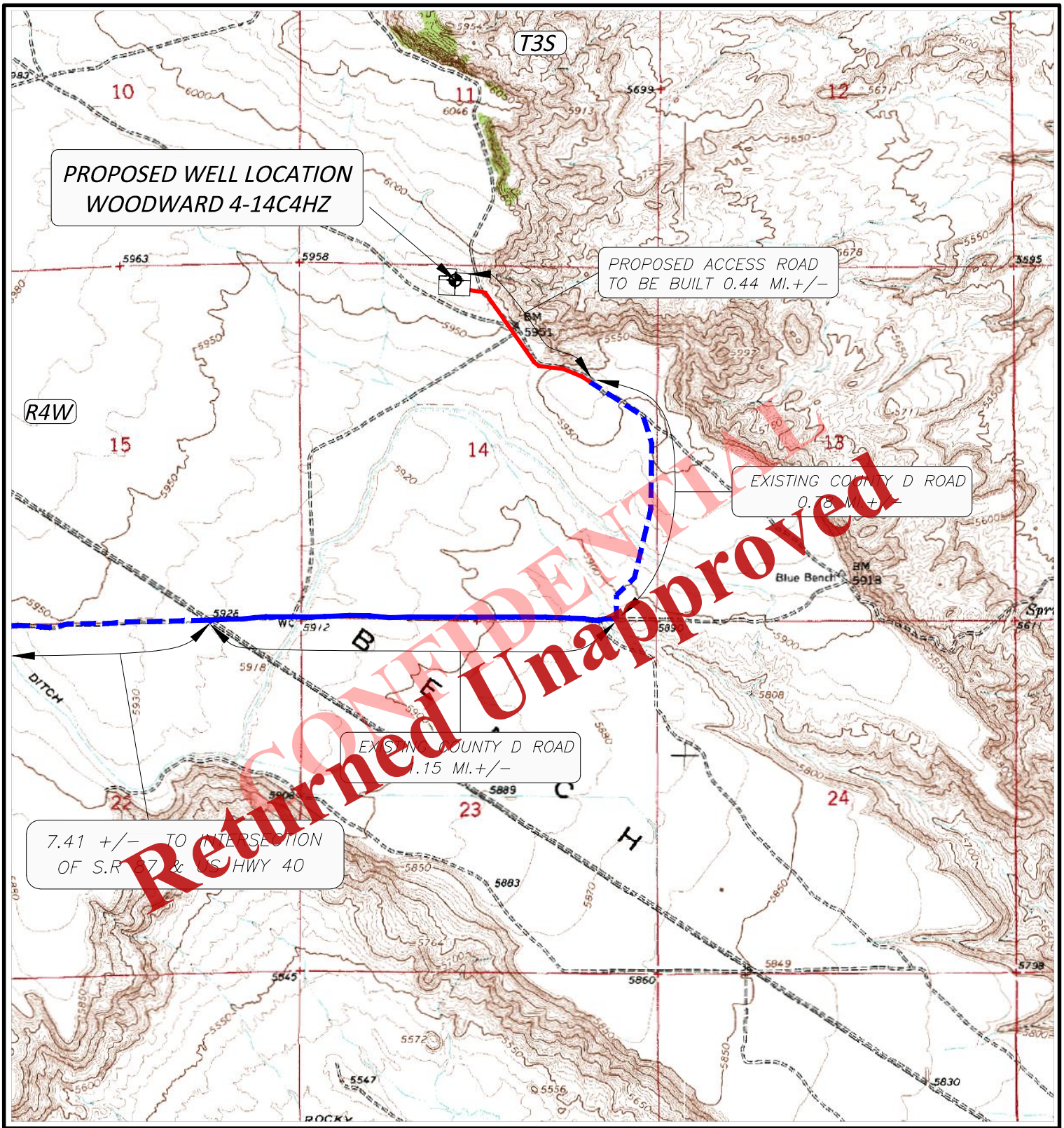
EP ENERGY E&P COMPANY, L.P.

WOODWARD 4-14C4HZ
SECTION 14, T3S, R4W, U.S.B.&M.
275' FNL 2315' FWL

TOPOGRAPHIC MAP "A"

SCALE; 1"=10,000'
27 AUG 2013

Received: October 11, 2013



LEGEND:

- PROPOSED WELL LOCATION
- PROPOSED ACCESS ROAD
- EXISTING GRAVEL ROAD
- EXISTING PAVED ROAD

01-128-422

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS
1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

NORTH

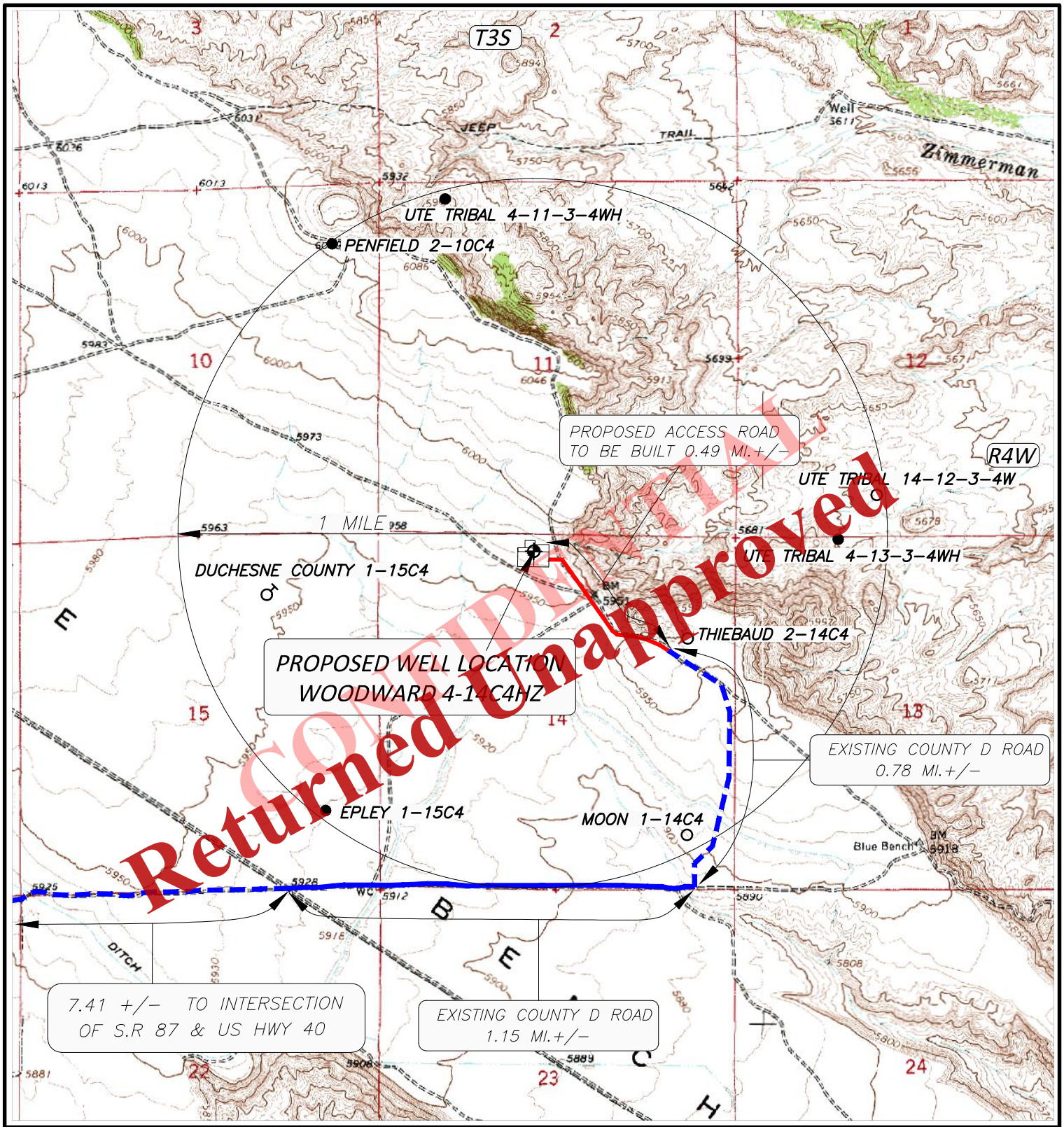
EP ENERGY E&P COMPANY, L.P.

WOODWARD 4-14C4HZ
SECTION 14, T3S, R4W, U.S.B.&M.
275' FNL 2315' FWL

TOPOGRAPHIC MAP "B"

SCALE; 1"=2000'
27 AUG 2013

Received: October 11, 2013



LEGEND:

PROPOSED WELL LOCATION

01-128-422

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

NORTH

EP ENERGY E&P COMPANY, L.P.

WOODWARD 4-14C4HZ
SECTION 14, T3S, R4W, U.S.B.&M.
275' FNL 2315' FWL

TOPOGRAPHIC MAP "C"

SCALE; 1"=2000'
27 AUG 2013

Received: October 11, 2013

EP Energy

Field: Duchesne Co, UT
Site: Woodward 4-14C4 HZ
Well: Woodward 4-14C4 HZ
Wellpath: OH
Plan: Plan #2

Azimuths to True North
Magnetic North: 11.15°

Magnetic Field
Strength: 52156nT
Dip Angle: 65.84°
Date: 9/20/2013
Model: IGRF2010

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FIELD DETAILS

Duchesne Co, UT

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: Utah, Central Zone
Magnetic Model: IGRF2010

System Datum: Mean Sea Level
Local North: True North

SITE DETAILS

Woodward 4-14C4 HZ
Sec. 14-T3S-R4W
275' FNL & 2315' FWL

Site Centre Latitude: 40°13'38.985N
Longitude: 110°18'16.518W

Ground Level: 5980.00
Positional Uncertainty: 0.00
Convergence: 0.77

WELLPATH DETAILS

OH
Rig:
Ref. Datum: SITE 5997.00ft

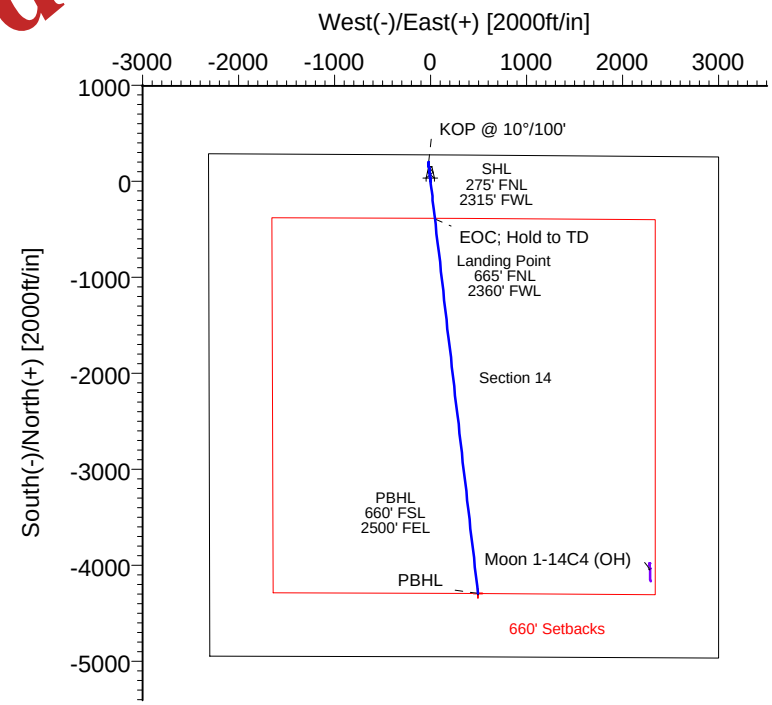
V.Section Angle	Origin +N/-S	Origin +E/-W	Starting From TVD
173.45	0.00	0.00	0.00

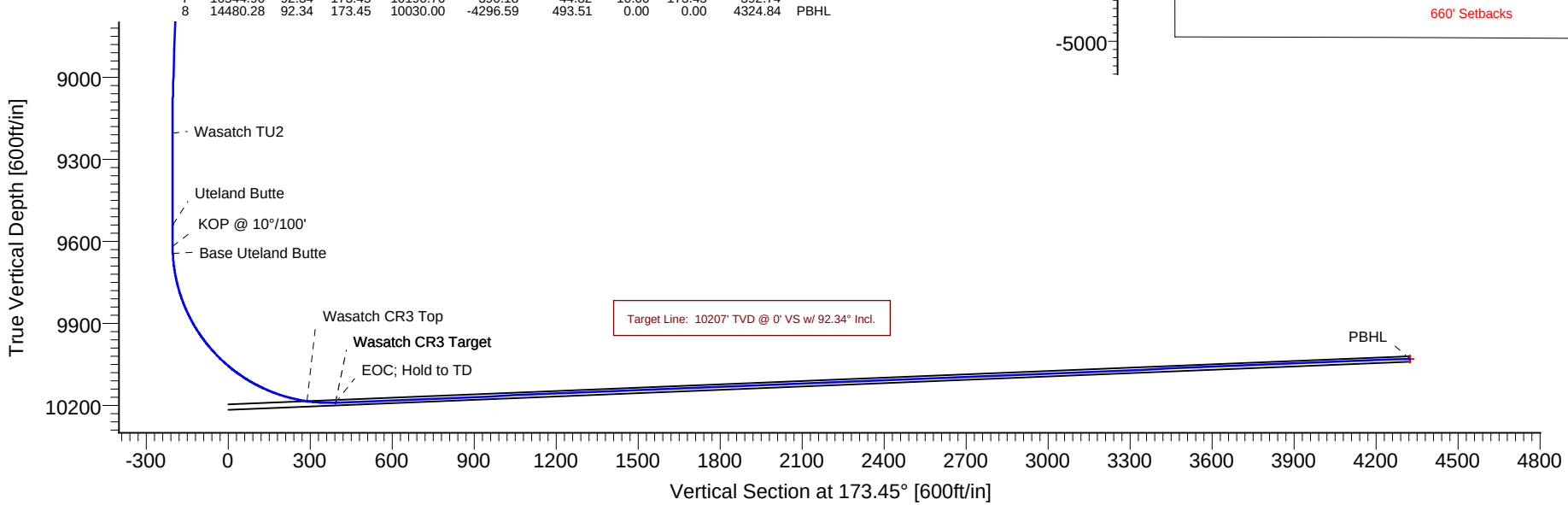
TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	10030.00	-4296.59	493.51	7249546.80	1974731.68	40°12'56.523N	110°18'10.156W	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	
3	2721.13	1.82	353.45	2721.11	1.91	-0.22	1.50	0.00	-1.92	
4	9022.08	1.82	353.45	9018.89	200.38	-23.01	0.00	0.00	-201.70	
5	9143.21	0.00	0.00	9140.00	202.29	-23.23	1.50	180.00	-203.62	
6	9621.49	0.00	0.00	9618.28	202.29	-23.23	0.00	0.00	-203.62	
7	10544.90	92.34	173.45	10190.76	-390.18	44.82	10.00	173.45	392.74	
8	14480.28	92.34	173.45	10030.00	-4296.59	493.51	0.00	0.00	4324.84	PBHL





Ryan Energy Technologies
19510 Oil Center Blvd
Houston, TX 77073
Ph: 281-443-1414
Fx: 281-443-1676

RYAN DIRECTIONAL SERVICES
A NABORS COMPANY

Plan: Plan #2 (Woodward 4-14C4 HZ/OH)
Created By: Douglas Hudson Date: 9/23/2013
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____

Received: October 11, 2013

EP ENERGY

Ryan Directional Services
Planning Report

RYAN DIRECTIONAL SERVICES
A NABORS COMPANY

Company:	EP Energy	**Date:** 9/23/2013	**Time:** 09:10:03	**Page:**	1
Field:	Duchesne Co, UT	**Co-ordinate(NE) Reference:**	Site: Woodward 4-14C4 HZ, True North		
Site:	Woodward 4-14C4 HZ	**Vertical (TVD) Reference:**	SITE 5997.0		
Well:	Woodward 4-14C4 HZ	**Section (VS) Reference:**	Well (0.00N,0.00E,173.45Azi)		
Wellpath:	OH	**Plan:**	Plan #2		

Field: Duchesne Co, UT

Map System: US State Plane Coordinate System 1983 — **Map Zone:** Utah, Central Zone
Geo Datum: GRS 1980 — **Coordinate System:** Site Centre
Sys Datum: Mean Sea Level — **Geomagnetic Model:** IGRF2010

Site: Woodward 4-14C4 HZ
Sec. 14-T3S-R4W
275' FNL & 2315' FWL

Site Position: — **Northing:** 7253836.40 ft — **Latitude:** 40 13 38.985 N
From: Geographic — **Easting:** 1974180.79 ft — **Longitude:** 110 18 16.518 W
Position Uncertainty: 0.00 ft — **North Reference:** True
Ground Level: 5980.00 ft — **Grid Convergence:** 0.77 deg

Well: Woodward 4-14C4 HZ — **Slot Name:**

Well Position: +N/-S 0.00 ft — **Northing:** 7253836.40 ft — **Latitude:** 40 13 38.985 N
+E/-W 0.00 ft — **Easting :** 1974180.79 ft — **Longitude:** 110 18 16.518 W
Position Uncertainty: 2.00 ft

Wellpath: OH — **Drilled From:** Surface
Tie-on Depth: 0.00 ft
Current Datum: SITE — **Height** 5997.00 ft — **Above System Datum:** Mean Sea Level
Magnetic Data: 9/20/2013 — **Declination:** 11.15 deg
Field Strength: 52156 nT — **Mag Dip Angle:** 65.84 deg

Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	0.00	0.00	0.00	173.45

Plan: Plan #2 — **Date Composed:** 9/20/2013
Version: 1
Principal: Yes — **Tied-to:** From Surface

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Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2721.13	1.82	353.45	2721.11	1.91	-0.22	1.50	1.50	0.00	0.00	
9022.08	1.82	353.45	9018.89	200.38	-23.01	0.00	0.00	0.00	0.00	
9143.21	0.00	0.00	9140.00	202.29	-23.23	1.50	-1.50	0.00	180.00	
9621.49	0.00	0.00	9618.28	202.29	-23.23	0.00	0.00	0.00	0.00	
10544.90	92.34	173.45	10190.76	-390.18	44.82	10.00	10.00	18.78	173.45	
14480.28	92.34	173.45	10030.00	-4296.59	493.51	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
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	Ryan MWD
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD

Received: October 11, 2013

Company:	EP Energy	**Date:** 9/23/2013	**Time:** 09:10:03	**Page:**	2
Field:	Duchesne Co, UT	**Co-ordinate(NE) Reference:**	Site: Woodward 4-14C4 HZ, True North		
Site:	Woodward 4-14C4 HZ	**Vertical (TVD) Reference:**	SITE 5997.0		
Well:	Woodward 4-14C4 HZ	**Section (VS) Reference:**	Well (0.00N,0.00E,173.45Azi)		
Wellpath:	OH	**Plan:**	Plan #2		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1497.00	0.00	0.00	1497.00	0.00	0.00	0.00	0.00	0.00	0.00	Base MSGW
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	Ryan MWD
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Back Build
2700.00	1.50	353.45	2699.99	1.30	-0.15	-1.31	1.50	1.50	0.00	Ryan MWD
2721.13	1.82	353.45	2721.11	1.91	-0.22	-1.92	1.50	1.50	0.00	Ryan MWD
2800.00	1.82	353.45	2799.94	4.39	-0.50	-4.42	0.00	0.00	0.00	Ryan MWD
2900.00	1.82	353.45	2899.89	7.54	-0.87	-7.59	0.00	0.00	0.00	Ryan MWD
3000.00	1.82	353.45	2999.84	10.69	-1.23	-10.76	0.00	0.00	0.00	Ryan MWD
3100.00	1.82	353.45	3099.79	13.84	-1.59	-13.93	0.00	0.00	0.00	Ryan MWD
3200.00	1.82	353.45	3199.74	16.99	-1.95	-17.10	0.00	0.00	0.00	Ryan MWD
3300.00	1.82	353.45	3299.69	20.14	-2.31	-20.27	0.00	0.00	0.00	Ryan MWD
3400.00	1.82	353.45	3399.64	23.29	-2.67	-23.44	0.00	0.00	0.00	Ryan MWD
3500.00	1.82	353.45	3499.59	26.44	-3.04	-26.62	0.00	0.00	0.00	Ryan MWD
3600.00	1.82	353.45	3599.54	29.59	-3.40	-29.79	0.00	0.00	0.00	Ryan MWD
3700.00	1.82	353.45	3699.49	32.74	-3.76	-32.96	0.00	0.00	0.00	Ryan MWD
3800.00	1.82	353.45	3799.44	35.89	-4.12	-36.13	0.00	0.00	0.00	Ryan MWD
3900.00	1.82	353.45	3899.39	39.04	-4.48	-39.30	0.00	0.00	0.00	Ryan MWD
4000.00	1.82	353.45	3999.34	42.19	-4.85	-42.47	0.00	0.00	0.00	Ryan MWD
4100.00	1.82	353.45	4099.29	45.34	-5.21	-45.64	0.00	0.00	0.00	Ryan MWD
4200.00	1.82	353.45	4199.24	48.49	-5.57	-48.81	0.00	0.00	0.00	Ryan MWD
4300.00	1.82	353.45	4299.19	51.64	-5.93	-51.98	0.00	0.00	0.00	Ryan MWD
4400.00	1.82	353.45	4399.14	54.79	-6.29	-55.15	0.00	0.00	0.00	Ryan MWD
4403.87	1.82	353.45	4403.00	54.91	-6.31	-55.27	0.00	0.00	0.00	Green River
4500.00	1.82	353.45	4499.09	57.94	-6.65	-58.32	0.00	0.00	0.00	Ryan MWD
4600.00	1.82	353.45	4599.04	61.09	-7.02	-61.49	0.00	0.00	0.00	Ryan MWD
4700.00	1.82	353.45	4698.98	64.24	-7.38	-64.66	0.00	0.00	0.00	Ryan MWD
4800.00	1.82	353.45	4798.93	67.39	-7.74	-67.83	0.00	0.00	0.00	Ryan MWD
4900.00	1.82	353.45	4898.88	70.54	-8.10	-71.00	0.00	0.00	0.00	Ryan MWD
5000.00	1.82	353.45	4998.83	73.69	-8.46	-74.17	0.00	0.00	0.00	Ryan MWD
5100.00	1.82	353.45	5098.78	76.84	-8.82	-77.35	0.00	0.00	0.00	Ryan MWD
5200.00	1.82	353.45	5198.73	79.99	-9.19	-80.52	0.00	0.00	0.00	Ryan MWD
5300.00	1.82	353.45	5298.68	83.14	-9.55	-83.69	0.00	0.00	0.00	Ryan MWD
5400.00	1.82	353.45	5398.63	86.29	-9.91	-86.86	0.00	0.00	0.00	Ryan MWD
5500.00	1.82	353.45	5498.58	89.44	-10.27	-90.03	0.00	0.00	0.00	Ryan MWD
5600.00	1.82	353.45	5598.53	92.59	-10.63	-93.20	0.00	0.00	0.00	Ryan MWD
5700.00	1.82	353.45	5698.48	95.74	-10.99	-96.37	0.00	0.00	0.00	Ryan MWD
5800.00	1.82	353.45	5798.43	98.89	-11.36	-99.54	0.00	0.00	0.00	Ryan MWD
5900.00	1.82	353.45	5898.38	102.04	-11.72	-102.71	0.00	0.00	0.00	Ryan MWD
6000.00	1.82	353.45	5998.33	105.19	-12.08	-105.88	0.00	0.00	0.00	Ryan MWD
6043.69	1.82	353.45	6042.00	106.57	-12.24	-107.27	0.00	0.00	0.00	Mahogany Bench
6100.00	1.82	353.45	6098.28	108.34	-12.44	-109.05	0.00	0.00	0.00	Ryan MWD
6159.75	1.82	353.45	6158.00	110.22	-12.66	-110.95	0.00	0.00	0.00	Lower Green River (TGR3)

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Returned Unapproved

Received: October 11, 2013

Company:	EP Energy	**Date:** 9/23/2013	**Time:** 09:10:03	**Page:**	3
Field:	Duchesne Co, UT	**Co-ordinate(NE) Reference:**	Site: Woodward 4-14C4 HZ, True North		
Site:	Woodward 4-14C4 HZ	**Vertical (TVD) Reference:**	SITE 5997.0		
Well:	Woodward 4-14C4 HZ	**Section (VS) Reference:**	Well (0.00N,0.00E,173.45Azi)		
Wellpath:	OH	**Plan:**	Plan #2		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6200.00	1.82	353.45	6198.23	111.49	-12.80	-112.22	0.00	0.00	0.00	Ryan MWD
6300.00	1.82	353.45	6298.18	114.64	-13.16	-115.39	0.00	0.00	0.00	Ryan MWD
6400.00	1.82	353.45	6398.13	117.79	-13.53	-118.56	0.00	0.00	0.00	Ryan MWD
6500.00	1.82	353.45	6498.08	120.94	-13.89	-121.73	0.00	0.00	0.00	Ryan MWD
6600.00	1.82	353.45	6598.03	124.09	-14.25	-124.90	0.00	0.00	0.00	Ryan MWD
6700.00	1.82	353.45	6697.98	127.24	-14.61	-128.07	0.00	0.00	0.00	Ryan MWD
6800.00	1.82	353.45	6797.93	130.39	-14.97	-131.25	0.00	0.00	0.00	Ryan MWD
6900.00	1.82	353.45	6897.88	133.54	-15.33	-134.42	0.00	0.00	0.00	Ryan MWD
7000.00	1.82	353.45	6997.83	136.69	-15.70	-137.59	0.00	0.00	0.00	Ryan MWD
7100.00	1.82	353.45	7097.78	139.84	-16.06	-140.76	0.00	0.00	0.00	Ryan MWD
7200.00	1.82	353.45	7197.73	142.99	-16.42	-143.93	0.00	0.00	0.00	Ryan MWD
7300.00	1.82	353.45	7297.68	146.14	-16.78	-147.10	0.00	0.00	0.00	Ryan MWD
7400.00	1.82	353.45	7397.63	149.29	-17.14	-150.27	0.00	0.00	0.00	Ryan MWD
7500.00	1.82	353.45	7497.58	152.44	-17.51	-153.44	0.00	0.00	0.00	Ryan MWD
7600.00	1.82	353.45	7597.53	155.59	-17.87	-156.61	0.00	0.00	0.00	Ryan MWD
7700.00	1.82	353.45	7697.48	158.74	-18.23	-159.78	0.00	0.00	0.00	Ryan MWD
7800.00	1.82	353.45	7797.43	161.89	-18.59	-162.95	0.00	0.00	0.00	Ryan MWD
7900.00	1.82	353.45	7897.38	165.04	-18.95	-166.12	0.00	0.00	0.00	Ryan MWD
8000.00	1.82	353.45	7997.33	168.19	-19.31	-169.29	0.00	0.00	0.00	Ryan MWD
8100.00	1.82	353.45	8097.28	171.34	-19.68	-172.46	0.00	0.00	0.00	Ryan MWD
8200.00	1.82	353.45	8197.23	174.49	-20.04	-175.63	0.00	0.00	0.00	Ryan MWD
8300.00	1.82	353.45	8297.17	177.64	-20.40	-178.80	0.00	0.00	0.00	Ryan MWD
8400.00	1.82	353.45	8397.12	180.79	-20.76	-181.98	0.00	0.00	0.00	Ryan MWD
8500.00	1.82	353.45	8497.07	183.94	-21.12	-185.15	0.00	0.00	0.00	Ryan MWD
8600.00	1.82	353.45	8597.02	187.09	-21.48	-188.32	0.00	0.00	0.00	Ryan MWD
8700.00	1.82	353.45	8696.97	190.24	-21.85	-191.49	0.00	0.00	0.00	Ryan MWD
8800.00	1.82	353.45	8796.92	193.39	-22.21	-194.66	0.00	0.00	0.00	Ryan MWD
8900.00	1.82	353.45	8896.87	196.54	-22.57	-197.83	0.00	0.00	0.00	Ryan MWD
9000.00	1.82	353.45	8996.82	199.69	-22.93	-201.00	0.00	0.00	0.00	Ryan MWD
9022.08	1.82	353.45	9018.89	200.38	-23.01	-201.70	0.00	0.00	0.00	Ryan MWD
9100.00	0.85	353.45	9096.79	202.05	-23.20	-203.38	1.50	-1.50	0.00	Ryan MWD
9143.21	0.00	0.00	9140.00	202.29	-23.23	-203.62	1.50	-1.50	0.00	Ryan MWD
9200.00	0.00	0.00	9196.79	202.29	-23.23	-203.62	0.00	0.00	0.00	Ryan MWD
9208.21	0.00	0.00	9205.00	202.29	-23.23	-203.62	0.00	0.00	0.00	Wasatch TU2
9300.00	0.00	0.00	9296.79	202.29	-23.23	-203.62	0.00	0.00	0.00	Ryan MWD
9400.00	0.00	0.00	9396.79	202.29	-23.23	-203.62	0.00	0.00	0.00	Ryan MWD
9500.00	0.00	0.00	9496.79	202.29	-23.23	-203.62	0.00	0.00	0.00	Ryan MWD
9542.21	0.00	0.00	9539.00	202.29	-23.23	-203.62	0.00	0.00	0.00	Uteland Butte
9600.00	0.00	0.00	9596.79	202.29	-23.23	-203.62	0.00	0.00	0.00	Ryan MWD
9621.49	0.00	0.00	9618.28	202.29	-23.23	-203.62	0.00	0.00	0.00	KOP @ 10°/100'
9647.22	2.57	173.45	9644.00	201.72	-23.16	-203.04	10.00	10.00	0.00	Base Uteland Butte
9650.00	2.85	173.45	9646.78	201.59	-23.15	-202.91	10.00	10.00	0.00	Ryan MWD
9700.00	7.85	173.45	9696.55	196.95	-22.62	-198.25	10.00	10.00	0.00	Ryan MWD
9750.00	12.85	173.45	9745.72	188.03	-21.59	-189.27	10.00	10.00	0.00	Ryan MWD
9800.00	17.85	173.45	9793.92	174.89	-20.08	-176.04	10.00	10.00	0.00	Ryan MWD
9850.00	22.85	173.45	9840.78	157.62	-18.10	-158.65	10.00	10.00	0.00	Ryan MWD
9900.00	27.85	173.45	9885.95	136.35	-15.66	-137.25	10.00	10.00	0.00	Ryan MWD
9950.00	32.85	173.45	9929.09	111.26	-12.77	-111.99	10.00	10.00	0.00	Ryan MWD
10000.00	37.85	173.45	9969.85	82.53	-9.47	-83.07	10.00	10.00	0.00	Ryan MWD
10050.00	42.85	173.45	10007.95	50.38	-5.78	-50.71	10.00	10.00	0.00	Ryan MWD
10100.00	47.85	173.45	10043.07	15.05	-1.72	-15.15	10.00	10.00	0.00	Ryan MWD
10150.00	52.85	173.45	10074.97	-23.18	2.67	23.34	10.00	10.00	0.00	Ryan MWD
10200.00	57.85	173.45	10103.39	-64.03	7.36	64.46	10.00	10.00	0.00	Ryan MWD

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Company:	EP Energy	**Date:** 9/23/2013	**Time:** 09:10:03	**Page:**	4
Field:	Duchesne Co, UT	**Co-ordinate(NE) Reference:**	Site: Woodward 4-14C4 HZ, True North		
Site:	Woodward 4-14C4 HZ	**Vertical (TVD) Reference:**	SITE 5997.0		
Well:	Woodward 4-14C4 HZ	**Section (VS) Reference:**	Well (0.00N,0.00E,173.45Azi)		
Wellpath:	OH	**Plan:**	Plan #2		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
10250.00	62.85	173.45	10128.11	-107.19	12.32	107.90	10.00	10.00	0.00	Ryan MWD
10300.00	67.85	173.45	10148.96	-152.32	17.50	153.33	10.00	10.00	0.00	Ryan MWD
10350.00	72.85	173.45	10165.77	-199.09	22.87	200.40	10.00	10.00	0.00	Ryan MWD
10400.00	77.85	173.45	10178.41	-247.13	28.39	248.76	10.00	10.00	0.00	Ryan MWD
10439.18	81.77	173.45	10185.34	-285.44	32.79	287.31	10.00	10.00	0.00	Wasatch CR3 Top
10450.00	82.85	173.45	10186.78	-296.09	34.01	298.04	10.00	10.00	0.00	Ryan MWD
10500.00	87.85	173.45	10190.83	-345.58	39.70	347.85	10.00	10.00	0.00	Ryan MWD
10544.90	92.34	173.45	10190.76	-390.18	44.82	392.74	10.00	10.00	0.00	Wasatch CR3 Target
10600.00	92.34	173.45	10188.51	-444.87	51.10	447.80	0.00	0.00	0.00	Ryan MWD
10700.00	92.34	173.45	10184.42	-544.14	62.50	547.71	0.00	0.00	0.00	Ryan MWD
10800.00	92.34	173.45	10180.34	-643.40	73.91	647.63	0.00	0.00	0.00	Ryan MWD
10900.00	92.34	173.45	10176.25	-742.66	85.31	747.55	0.00	0.00	0.00	Ryan MWD
11000.00	92.34	173.45	10172.17	-841.93	96.71	847.46	0.00	0.00	0.00	Ryan MWD
11100.00	92.34	173.45	10168.08	-941.19	108.11	947.38	0.00	0.00	0.00	Ryan MWD
11200.00	92.34	173.45	10164.00	-1040.46	119.51	1047.30	0.00	0.00	0.00	Ryan MWD
11300.00	92.34	173.45	10159.91	-1139.72	130.91	1147.21	0.00	0.00	0.00	Ryan MWD
11400.00	92.34	173.45	10155.83	-1238.98	142.31	1247.13	0.00	0.00	0.00	Ryan MWD
11500.00	92.34	173.45	10151.74	-1338.25	153.72	1347.05	0.00	0.00	0.00	Ryan MWD
11600.00	92.34	173.45	10147.66	-1437.51	165.12	1446.96	0.00	0.00	0.00	Ryan MWD
11700.00	92.34	173.45	10143.57	-1536.77	176.52	1546.88	0.00	0.00	0.00	Ryan MWD
11800.00	92.34	173.45	10139.49	-1636.04	187.92	1646.80	0.00	0.00	0.00	Ryan MWD
11900.00	92.34	173.45	10135.40	-1735.30	199.32	1746.71	0.00	0.00	0.00	Ryan MWD
12000.00	92.34	173.45	10131.32	-1834.57	210.72	1846.63	0.00	0.00	0.00	Ryan MWD
12100.00	92.34	173.45	10127.23	-1933.83	222.12	1946.55	0.00	0.00	0.00	Ryan MWD
12200.00	92.34	173.45	10123.15	-2033.09	233.53	2046.46	0.00	0.00	0.00	Ryan MWD
12300.00	92.34	173.45	10119.06	-2132.36	244.93	2146.38	0.00	0.00	0.00	Ryan MWD
12400.00	92.34	173.45	10114.98	-2231.62	256.33	2246.29	0.00	0.00	0.00	Ryan MWD
12500.00	92.34	173.45	10110.89	-2330.89	267.73	2346.21	0.00	0.00	0.00	Ryan MWD
12600.00	92.34	173.45	10106.81	-2430.15	279.13	2446.13	0.00	0.00	0.00	Ryan MWD
12700.00	92.34	173.45	10102.72	-2529.41	290.53	2546.04	0.00	0.00	0.00	Ryan MWD
12800.00	92.34	173.45	10098.64	-2628.68	301.93	2645.96	0.00	0.00	0.00	Ryan MWD
12900.00	92.34	173.45	10094.55	-2727.94	313.34	2745.88	0.00	0.00	0.00	Ryan MWD
13000.00	92.34	173.45	10090.47	-2827.21	324.74	2845.79	0.00	0.00	0.00	Ryan MWD
13100.00	92.34	173.45	10086.38	-2926.47	336.14	2945.71	0.00	0.00	0.00	Ryan MWD
13200.00	92.34	173.45	10082.30	-3025.73	347.54	3045.63	0.00	0.00	0.00	Ryan MWD
13300.00	92.34	173.45	10078.21	-3125.00	358.94	3145.54	0.00	0.00	0.00	Ryan MWD
13400.00	92.34	173.45	10074.13	-3224.26	370.34	3245.46	0.00	0.00	0.00	Ryan MWD
13500.00	92.34	173.45	10070.04	-3323.52	381.74	3345.38	0.00	0.00	0.00	Ryan MWD
13600.00	92.34	173.45	10065.96	-3422.79	393.15	3445.29	0.00	0.00	0.00	Ryan MWD
13700.00	92.34	173.45	10061.87	-3522.05	404.55	3545.21	0.00	0.00	0.00	Ryan MWD
13800.00	92.34	173.45	10057.79	-3621.32	415.95	3645.13	0.00	0.00	0.00	Ryan MWD
13900.00	92.34	173.45	10053.70	-3720.58	427.35	3745.04	0.00	0.00	0.00	Ryan MWD
14000.00	92.34	173.45	10049.62	-3819.84	438.75	3844.96	0.00	0.00	0.00	Ryan MWD
14100.00	92.34	173.45	10045.53	-3919.11	450.15	3944.88	0.00	0.00	0.00	Ryan MWD
14200.00	92.34	173.45	10041.45	-4018.37	461.56	4044.79	0.00	0.00	0.00	Ryan MWD
14300.00	92.34	173.45	10037.36	-4117.64	472.96	4144.71	0.00	0.00	0.00	Ryan MWD
14400.00	92.34	173.45	10033.28	-4216.90	484.36	4244.63	0.00	0.00	0.00	Ryan MWD
14480.28	92.34	173.45	10030.00	-4296.59	493.51	4324.84	0.00	0.00	0.00	PBHL

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Company:	EP Energy	**Date:** 9/23/2013	**Time:** 09:10:03	**Page:**	5
Field:	Duchesne Co, UT	**Co-ordinate(NE) Reference:**	Site: Woodward 4-14C4 HZ, True North		
Site:	Woodward 4-14C4 HZ	**Vertical (TVD) Reference:**	SITE 5997.0		
Well:	Woodward 4-14C4 HZ	**Section (VS) Reference:**	Well (0.00N,0.00E,173.45Azi)		
Wellpath:	OH	**Plan:**	Plan #2		

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ----> Deg Min Sec	<--- Longitude ---> Deg Min Sec
PBHL			10030.00	-4296.59	493.51	7249546.80	1974731.68	40 12 56.523 N	110 18 10.156 W

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
1497.00	1497.00	Base MSGW		0.00	0.00
4403.87	4403.00	Green River		0.00	0.00
6043.69	6042.00	Mahogany Bench		0.00	0.00
6159.75	6158.00	Lower Green River (TGR3)		0.00	0.00
9208.21	9205.00	Wasatch TU2		0.00	0.00
9542.21	9539.00	Uteland Butte		0.00	0.00
9647.22	9644.00	Base Uteland Butte		0.00	0.00
10439.18	10185.34	Wasatch CR3 Top		2.34	0.00
10544.90	10190.76	Wasatch CR3 Target		2.34	0.00

Annotation

MD ft	TVD ft	
2600.00	2600.00	Start Back Build
9621.49	9618.28	KOP @ 10°/100'
10544.90	10190.76	EOC; Hold to TD
10544.90	10190.76	Wasatch CR3 Target

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AFFIDAVIT OF DAMAGE SETTLEMENT AND RELEASE

Orion L. Mitchell personally appeared before me, and, being duly sworn, deposes and says:

1. My name is Orion L. Mitchell. I am a Landman for EP Energy E&P Company, L.P., formally known as El Paso E&P Company, L.P., whose address is 1001 Louisiana Street, Houston, Texas 77002 ("EP Energy").
2. EP Energy is the operator of the proposed Woodward 4-14C4HZ well ("the Well"). Its surface hole location is to be located in the NE/4NW/4 and its bottom hole location is to be located in the SW/4SE/4 of Section 14, Township 3 South, Range 4 West, U.S.B.&M., Duchesne County, Utah (the "Drillsite Location"). The surface owner of the Drillsite Location is Caroline Beth Woodward, whose address is 1087 North 200 East, Orem, Utah 84057 and whose telephone number is 801-225-6468 (the "Surface Owner").
3. EP Energy and the Surface Owner have entered into a Damage Settlement and Release Agreement dated August 29, 2013 to cover any and all injuries or damages of every character and description sustained by the Surface Owners or Surface Owner's property as a result of operations associated with the drilling of the Well.

FURTHER AFFIANT SAYETH NOT.

Orion L. Mitchell

Orion L. Mitchell

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF HARRIS §

This instrument was acknowledged before me on this 5th day of September, 2013 by Orion L. Mitchell as a Landman for EP ENERGY E&P COMPANY, L.P., a Delaware limited partnership, on behalf of said partnership and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.

GINGER M CEARLEY
NOTARY PUBLIC, STATE OF TEXAS
MY COMMISSION EXPIRES
AUG. 2, 2014

Ginger M. Cearley

Notary Public in and for State of Texas

Received: October 11, 2013

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 .44 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 .44 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 place 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.

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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:

Caroline Beth Woodward
1087 North 200 East
Orem, UT 84057
801-225-6468

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

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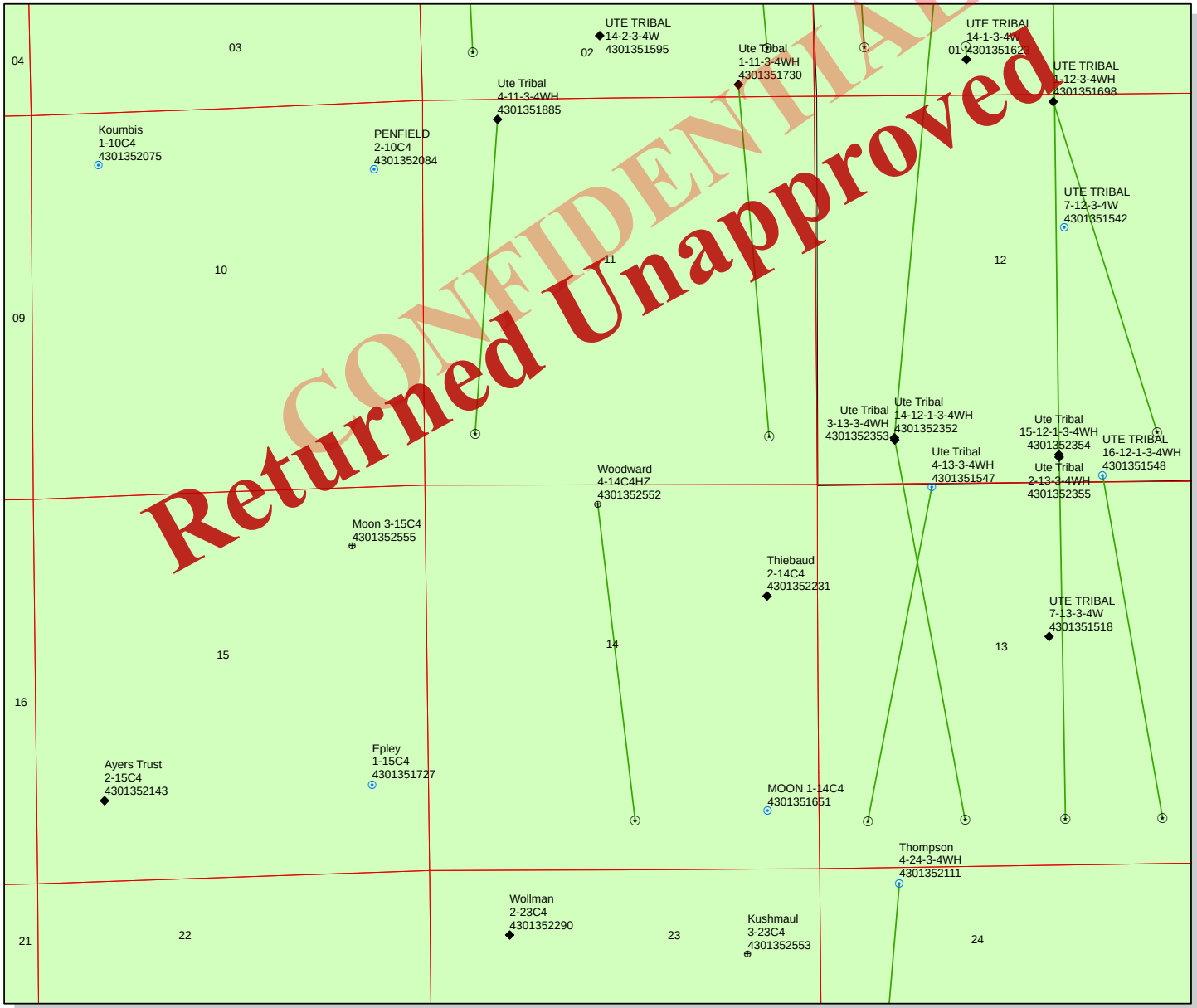

API Number: 4301352552

Well Name: Woodward 4-14C4HZ

Township: T03.0S Range: R04.0W Section: 14 Meridian: U

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

Map Prepared: 10/15/2013
Map Produced by Diana Mason

Wells Query

Status

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

Units

STATUS

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

1,700 850 0 1,700 Feet

1:16,807

Received: October 15, 2013

BOPE REVIEW **EP ENERGY E&P COMPANY, L.P. Woodward 4-14C4HZ 43013525520000**

Well Name	EP ENERGY E&P COMPANY, L.P. Woodward 4-14C4HZ 43013525520			
String	Cond	Surf	I1	L1
Casing Size(")	13.375	9.625	7.000	5.000
Setting Depth (TVD)	750	2500	9405	10030
Previous Shoe Setting Depth (TVD)	0	750	2500	9405
Max Mud Weight (ppg)	8.8	9.5	10.6	13.4
BOPE Proposed (psi)	1000	1000	5000	10000
Casing Internal Yield (psi)	2730	5750	11220	12410
Operators Max Anticipated Pressure (psi)	6989			13.4

Calculations	Cond String	13.375	"	
Max BHP (psi)	.052*Setting Depth*MW=	343		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	253	YES	4.5 x 20 rotating head on structural pipe
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	178	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	178	NO	OK
Required Casing/BOPE Test Pressure=		750	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=	1235		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	935	YES	4.5 x 13 3/8 Smith rotating head
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	735	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	850	NO	OK
Required Casing/BOPE Test Pressure=		2500	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		750	psi	*Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	5184		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4055	YES	5M BOPE with annular, dbl rams, choke
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3115	YES	manifold
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3665	NO	OK
Required Casing/BOPE Test Pressure=		7854	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		2500	psi	*Assumes 1psi/ft frac gradient

Calculations	L1 String	5.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	6989		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	5785	YES	10M BOPE w/rotating head, 5M annular,
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	4782	YES	blind rams & mud cross
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	6852	YES	OK
Required Casing/BOPE Test Pressure=		8687	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		9405	psi	*Assumes 1psi/ft frac gradient

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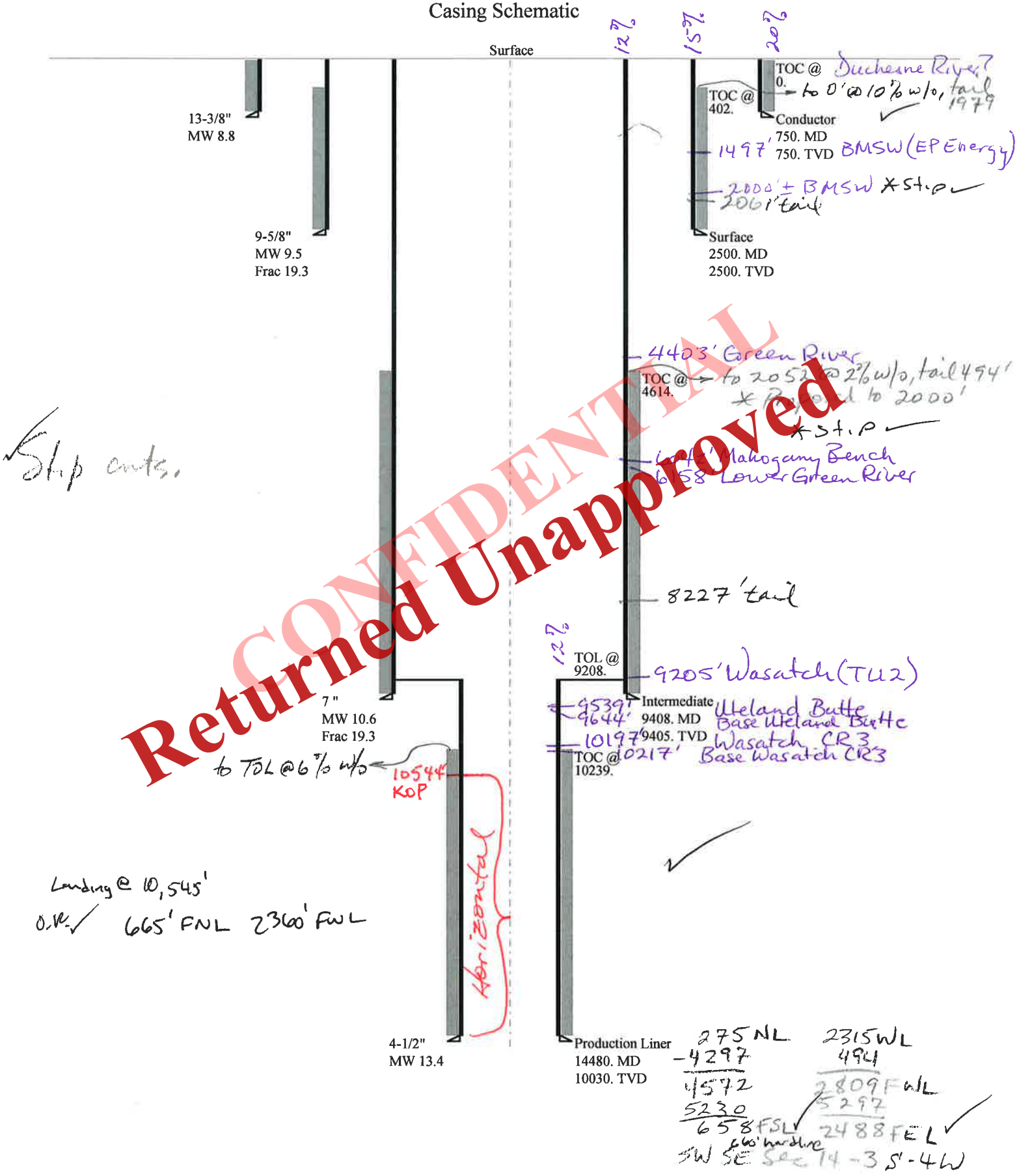
Received: December 18, 2013

43013525520000 Woodward 4-14C4HZ

Casing Schematic



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Returned Unapproved

Received: December 18, 2013

Well name:	**43013525520000 Woodward 4-14C4HZ**
Operator:	**EP ENERGY E&P COMPANY, LP.**
String type:	Conductor
Project ID:	43-013-52552
Location:	UINTAH COUNTY

Design parameters:

Collapse

Mud weight: 8.800 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 253 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 343 psi

Annular backup: 1.50 ppg

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.70 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight.

Neutral point: 652 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 84 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 100 ft

Cement top: Surface

Non-directional string.

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Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	750	13.375	54.50	J-55	ST&C	750	750	12.49	9306

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	343	1130	3.296	284	2730	9.60	35.6	514	14.46 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: December 3,2013
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 750 ft, a mud weight of 8.8 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Received: December 18, 2013

Well name:	**43013525520000 Woodward 4-14C4HZ**
Operator:	**EP ENERGY E&P COMPANY, LP.**
String type:	Surface
Project ID:	43-013-52552
Location:	UINTAH COUNTY

Design parameters:

Collapse

Mud weight: 9.500 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 2,200 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 2,500 psi

Annular backup: 1.50 ppg

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.70 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on buoyed weight.

Neutral point: 2,147 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 109 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 100 ft

Cement top: 402 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 9,405 ft

Next mud weight: 10.600 ppg

Next setting BHP: 5,179 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 2,500 ft

Injection pressure: 2,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	2500	9.625	40.00	N-80	LT&C	2500	2500	8.75	31812

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1234	3090	2.505	2305	5750	2.49	85.9	737	8.58 J

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Returned Unapproved

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: December 3,2013
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2500 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Received: December 18, 2013

Well name:	**43013525520000 Woodward 4-14C4HZ**
Operator:	**EP ENERGY E&P COMPANY, LP.**
String type:	Intermediate
Project ID:	43-013-52552
Location:	UINTAH COUNTY

Design parameters:

Collapse

Mud weight: 10.600 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 4,775 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 6,844 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.60 (B)

Tension is based on buoyed weight.

Neutral point: 7,899 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 206 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,000 ft

Cement top: 4,614 ft

Directional Info - Build & Hold

Kick-off point 2600 ft

Departure at shoe: 204 ft

Maximum dogleg: 1.5 °/100ft

Inclination at shoe: 0 °

Re subsequent strings:

Next setting depth: 10,030 ft

Next mud weight: 13.400 ppg

Next setting BHP: 6,982 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 9,405 ft

Injection pressure: 9,405 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	9408	7	29.00	HCP-110	LT&C	9405	9408	6.059	106241

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	5179	9200	1.776	6844	11220	1.64	229	797	3.48 J

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Returned Unapproved

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: December 3,2013
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9405 ft, a mud weight of 10.6 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

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

Received: December 18, 2013

Well name:	**43013525520000 Woodward 4-14C4HZ**
Operator:	**EP ENERGY E&P COMPANY, LP.**
String type:	Production Liner
Project ID:	43-013-52552
Location:	UINTAH COUNTY

Design parameters:

Collapse

Mud weight: 13.400 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 4,775 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 6,982 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.60 (B)

Tension is based on buoyed weight.

Neutral point: 9,878 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 214 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 1,000 ft

Cement top: 10,239 ft

Liner top: 9,208 ft

Directional Info - Build & Hold

Kick-off point 2600 ft

Departure at shoe: 4324 ft

Maximum dogleg: 10 °/100ft

Inclination at shoe: 92.34 °

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Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	5280	4.5	13.50	HCP-110	LT&C	10030	14480	3.795	29586

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	6982	10680	1.530	7017	12410	1.77	9	338	37.45 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: December 3,2013
Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 10030 ft, a mud weight of 13.4 ppg The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

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

Received: December 18, 2013

EP ENERGY

February 6, 2014

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: Horizontal Drilling
Woodward 4-14C4 HZ Well
Surface Hole Location: 275' FNL, 2315' FWL (NENW) Section 14-3S-4W, U.S.B.&M.
Last Perforation: 665' FNL, 2400' FWL (NENW) Section 14-3S-4W, U.S.B.&M.
Bottom Hole Location: 680' FSL, 1995' FEL (SWSE) Section 14-3S-4W, U.S.B.&M.
Duchesne County, Utah

Dear Mr. Hill,

Enclosed please find an Application for Permit to Drill for the above referenced well.

EP Energy E&P Company, L.P. ("EPE") would like to drill this horizontal well in Section 14, Township 3 South, Range 4 West, Duchesne County, Utah, which is subject to that Order, Cause No. 139-90, dated May 9, 2012 ("Spacing Order") that extends Cause No. 139-8, which establishes 640 acre sectional drilling units for the Lower Green River-Wasatch formations. The Spacing Order further provides drilling up to four (4) producing Lower Green River-Wasatch wells, whether all vertical, all horizontal, or a combination of both. The location and siting requirements set forth in order 139-84 and incorporated into the Spacing Order provide that permitted wells shall be no closer than 1320 feet from an existing unit well completed in and producing from the spaced intervals and no closer than 660 feet from the drilling unit boundary.

EPE certifies that unless first obtaining an exception to the well location and siting requirements of the Spacing Order it will not perforate any part of the wellbore of the referenced well closer than 660 feet from the North section line or closer than 660 feet from the South section line of Section 14-3S-4W, Duchesne County, Utah.

Best regards,

Jacquelyn L. Lynch
Central Division – Altamont Business Area
EP Energy E&P Company, L.P.

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Returned Unapproved

EP Energy
1001 Louisiana Street Houston, Texas 77002
PO Box 4660 Houston, Texas 77210-4660
Tel 713.997.1000

Received: February 11, 2014

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

December 02, 2014

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

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

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the Woodward 4-14C4HZ well, API 43013525520000 that was submitted October 11, 2013 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

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

Sincerely,

Diana Mason
Environmental Scientist

Enclosure
cc: Bureau of Land Management, Vernal, Utah

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

UTAH DNR OIL, GAS & MINING