

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> DW Landfill 3-33B4				
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> ALTAMONT				
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>				
<b>6. NAME OF OPERATOR</b> EP ENERGY E&P COMPANY, L.P.						<b>7. OPERATOR PHONE</b> 713 997-5038				
<b>8. ADDRESS OF OPERATOR</b> 1001 Louisiana, Houston, TX, 77002						<b>9. OPERATOR E-MAIL</b> maria.gomez@epenergy.com				
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> 14-20-H62-1746			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>				
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b> Duchesne/Wasatch						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b> 435-822-2009				
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b> P.O. Box 356, Duchesne, UT 84021						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>				
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b> Ute			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>		
LOCATION AT SURFACE		800 FSL 1700 FWL		SESW	33	2.0 S	4.0 W	U		
Top of Uppermost Producing Zone		800 FSL 1700 FWL		SESW	33	2.0 S	4.0 W	U		
At Total Depth		800 FSL 1700 FWL		SESW	33	2.0 S	4.0 W	U		
<b>21. COUNTY</b> DUCHESNE			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 800			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 640				
<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 1700			<b>26. PROPOSED DEPTH</b> MD: 13200 TVD: 13200			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Duchesne City				
<b>27. ELEVATION - GROUND LEVEL</b> 6110			<b>28. BOND NUMBER</b> RLB0009692							
<b>Hole, Casing, and Cement Information</b>										
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	9.0	Class G	758	1.15	15.8
Surf	12.25	9.625	0 - 4000	40.0	N-80 LT&C	9.5	Unknown	572	3.16	11.0
							Unknown	194	1.31	14.3
I1	8.75	7	0 - 10000	29.0	HCP-110 LT&C	10.6	Unknown	323	2.32	12.0
							Unknown	202	1.64	13.0
L1	6.125	5	9800 - 13200	18.0	HCP-110 LT&C	13.8	Unknown	201	1.47	14.2
<b>ATTACHMENTS</b>										
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>										
<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 type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
<b>NAME</b> Maria S. Gomez			<b>TITLE</b> Principal Regulatory Analyst			<b>PHONE</b> 713 997-5038				
<b>SIGNATURE</b>			<b>DATE</b> 04/07/2014			<b>EMAIL</b> maria.gomez@epenergy.com				
<b>API NUMBER ASSIGNED</b> 43013529030000			<b>APPROVAL</b>  Permit Manager							

**DW Landfill 3-33B4  
Sec. 33, T2S, 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)	5,027' TVD
Green River (GRTN1)	5,827' TVD
Mahogany Bench	6,727' TVD
L. Green River	8,097' TVD
Wasatch	9,917' TVD
T.D. (Permit)	13,200' TVD

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River (GRRV)	5,027' MD / TVD
	Green River (GRTN1)	5,827' MD / TVD
	Mahogany Bench	6,727' MD / TVD
Oil	L. Green River	8,097' MD / TVD
Oil	Wasatch	9,917' MD / TVD

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

A 5.0" by 20.0" rotating head on structural pipe from surface to 600' MD/TVD. A 5.0" by 13-3/8" Smith Rotating Head (Diverter Stack) from 600' MD/TVD to 4,000' MD/TVD on Conductor. A 10M BOP stack w/ rotating head, 5M annular, flex rams, blind rams, mud cross & single w/ flex rams from 4,000' MD/TVD to 10,000' MD/TVD. A 10M BOP stack w/ rotating head, 5M annular, flex rams, blind rams, mud cross & single w/ flex rams from 10,000' MD/TVD to TD (13,200' MD/TVD).

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

**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 pipe rams, blind rams, mud cross and rotating head 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:**

Patterson # 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 600' - TD
- B) Mud logger with gas monitor – 4,000' to TD (13,200' MD/TVD)
- 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	WBM	9.0 – 9.5
Intermediate	WBM	9.5 – 10.6
Production	WBM	10.6 – 13.8

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: 4,000' MD/TVD – TD (13,200' MD/TVD)

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

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 13,200' TVD equals approximately 9,472 psi. This is calculated based on a 0.7176 psi/ft gradient (13.8 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 6,568 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 10,000' TVD = 8,000 psi

BOPE and casing design will be based on the lesser of the two MASPs which is 6,568 psi.

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



**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	4000	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0	10000	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	5'	9800	13200	18.00	HCP-110	STL	13,940	15,450	495

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	3,500	EXTENDACEM SYSTEM: 5 lbm/sk Silicalite Compacted + 0.25 lbm/sk Kwik Seal + 0.125 lbm/sk Poly-E-Flake + 2% Bentonite	572	75%	11.0 ppg	3.16
	Tail	500	HALCEM 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	194	50%	14.3 ppg	1.31
INTERMEDIATE	Lead	4,550	EXTENDACEM SYSTEM: Type G Cement + 10% Bentonite + 0.1% SA-1015 + 0.2% Econolite + 0.2% Halad-322 + 3 lbm/sk Silicalite Compacted + 1 lbm/sk Granulite TR 1/4 + 0.125 lbm/sk Poly-E-Flake + 5 lbm/sk Kol-Seal + 0.8% HR-5	323	10%	12.0 ppg	2.32
	Tail	1,950	EXPANDACEM SYSTEM: Type G Cement + 0.25 lbm/sk Poly-E-Flake + 4% Bentonite + 0.1% Halad-413 + 5 lb/sk Silicalite + 0.15 SA-1015	202	10%	13.0 ppg	1.64
PRODUCTION LINER		3,400	EXTENDACEM SYSTEM: 0.3% Super CBL + 0.1% 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	201	25%	14.20	1.47

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 8,000'.
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

**EP ENERGY E&P COMPANY, L.P.**  
**DW LANDFILL 3-33B4**  
**SECTION 33, T2S, R5W, 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 7.61 MILES TO AN INTERSECTION;

TURN RIGHT AND TRAVEL SOUTHEASTERLY ON A DIRT ROAD, 2.17 MILES TO THE BEGINNING OF THE ACCESS ROAD;

TURN LEFT AND FOLLOW ROAD FLAGS EASTERLY 0.31 MILES TO THE PROPOSED LOCATION;

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 10.09 MILES.

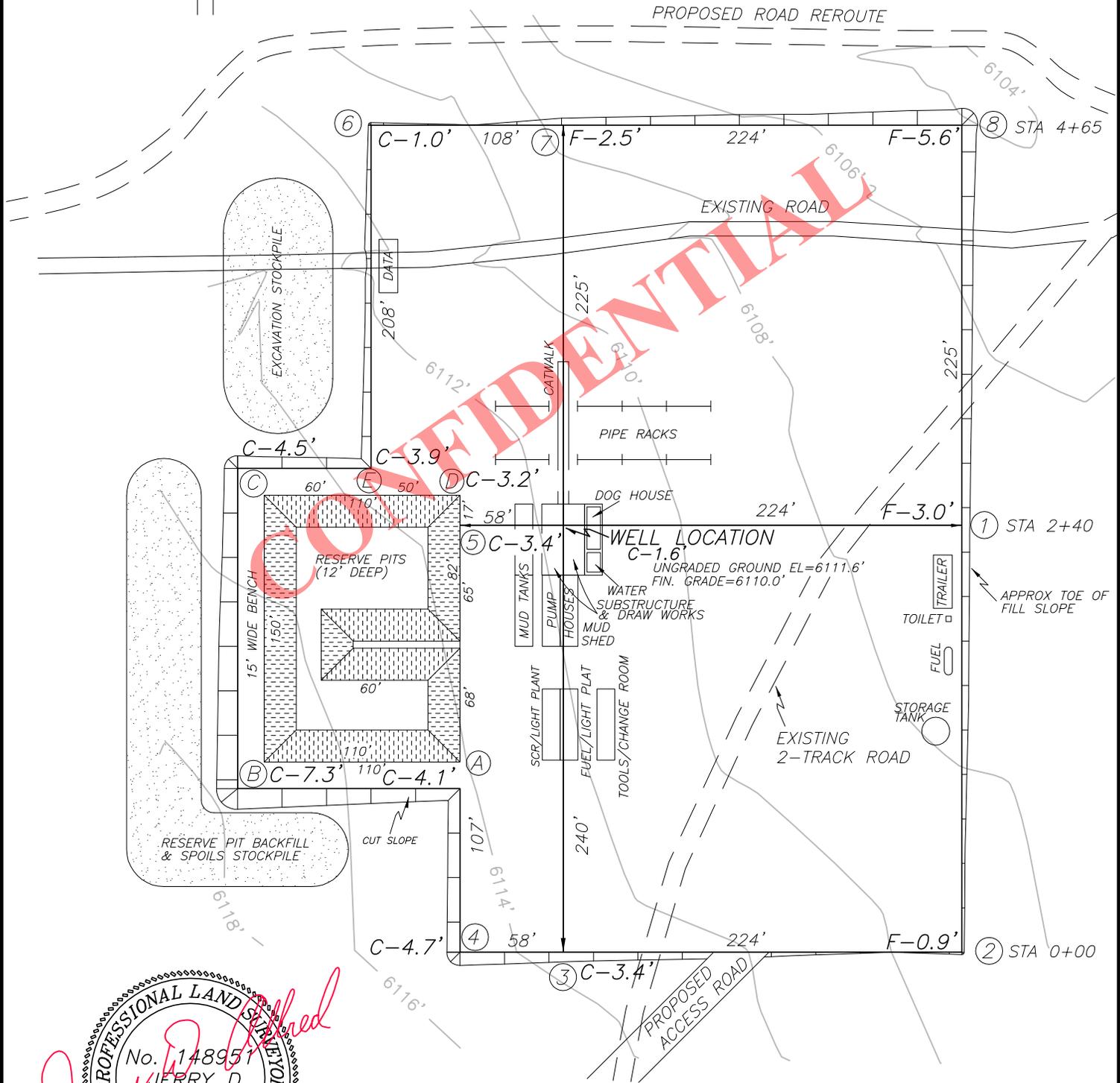
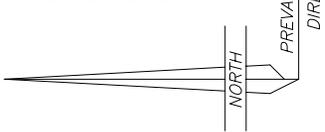
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# EP ENERGY E&P COMPANY, L.P.

FIGURE #1

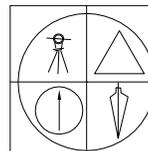
LOCATION LAYOUT FOR  
DW LANDFILL 3-33B4  
SECTION 33, T2S, R4W, U.S.B.&M.  
800' FSL, 1700' FWL

SCALE: 1"=80'  
0 80



16 DEC 2013

01-128-438



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SURVEYING CONSULTANTS

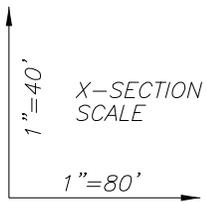
1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESNE, UTAH 84021  
(435) 738-5352

RECEIVED: April 07, 2014

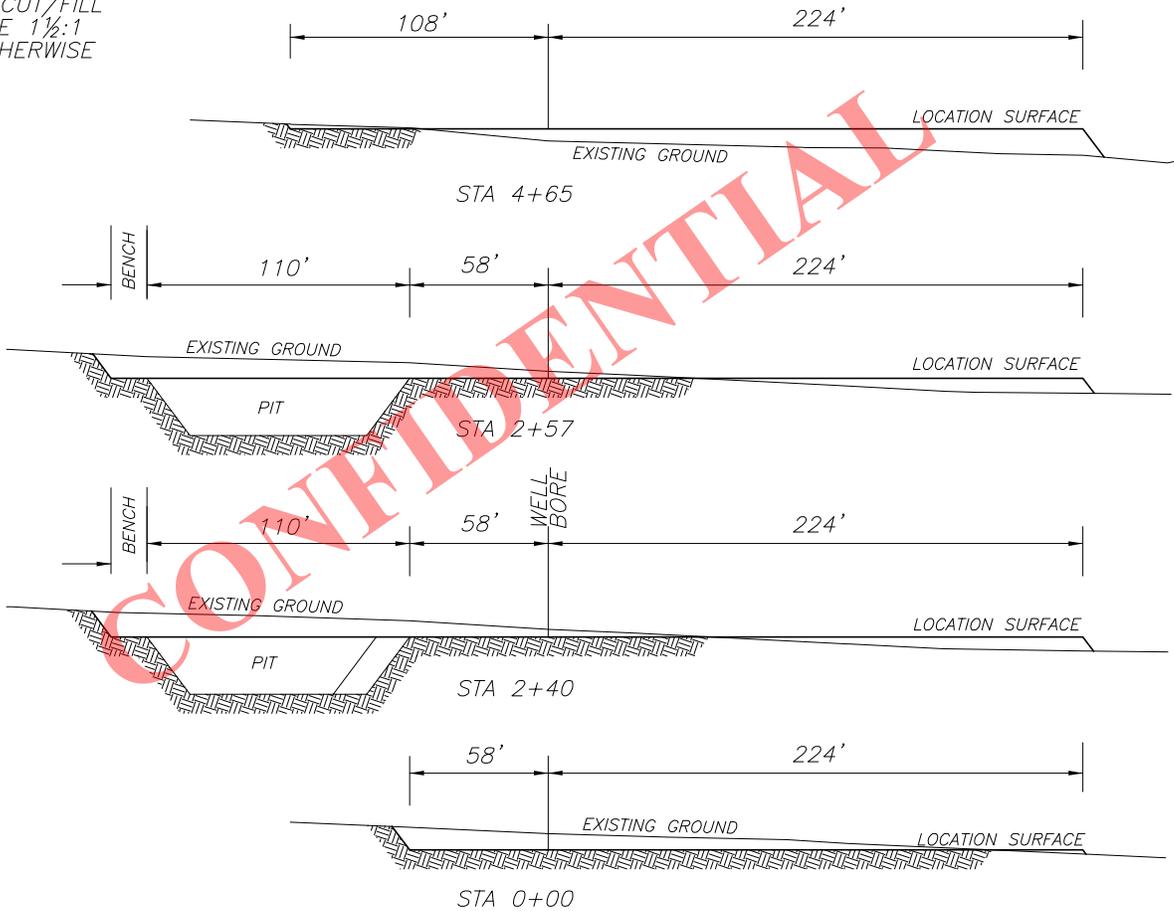
# EP ENERGY E&P COMPANY, L.P.

FIGURE #2

LOCATION LAYOUT FOR  
 DW LANDFILL 3-33B4  
 SECTION 33, T2S, R4W, U.S.B.&M.  
 800' FSL, 1700' FWL



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



APPROXIMATE YARDAGES

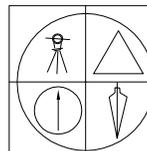
TOTAL CUT (INCLUDING PIT) = 15,402 CU. YDS.

PIT CUT = 4955 CU. YDS.  
 TOPSOIL STRIPPING: (6") = 3200 CU. YDS.  
 REMAINING LOCATION CUT = 7247 CU. YDS

TOTAL FILL = 7247 CU. YDS.

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

ACCESS ROAD GRAVEL=440 CU. YDS.



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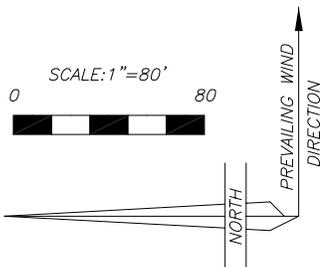
FIGURE #3

LOCATION LAYOUT FOR  
DW LANDFILL 3-33B4

SECTION 33, T2S, R4W, U.S.B.&M.

800' FSL, 1700' FWL

SCALE: 1"=80'

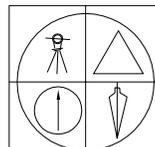
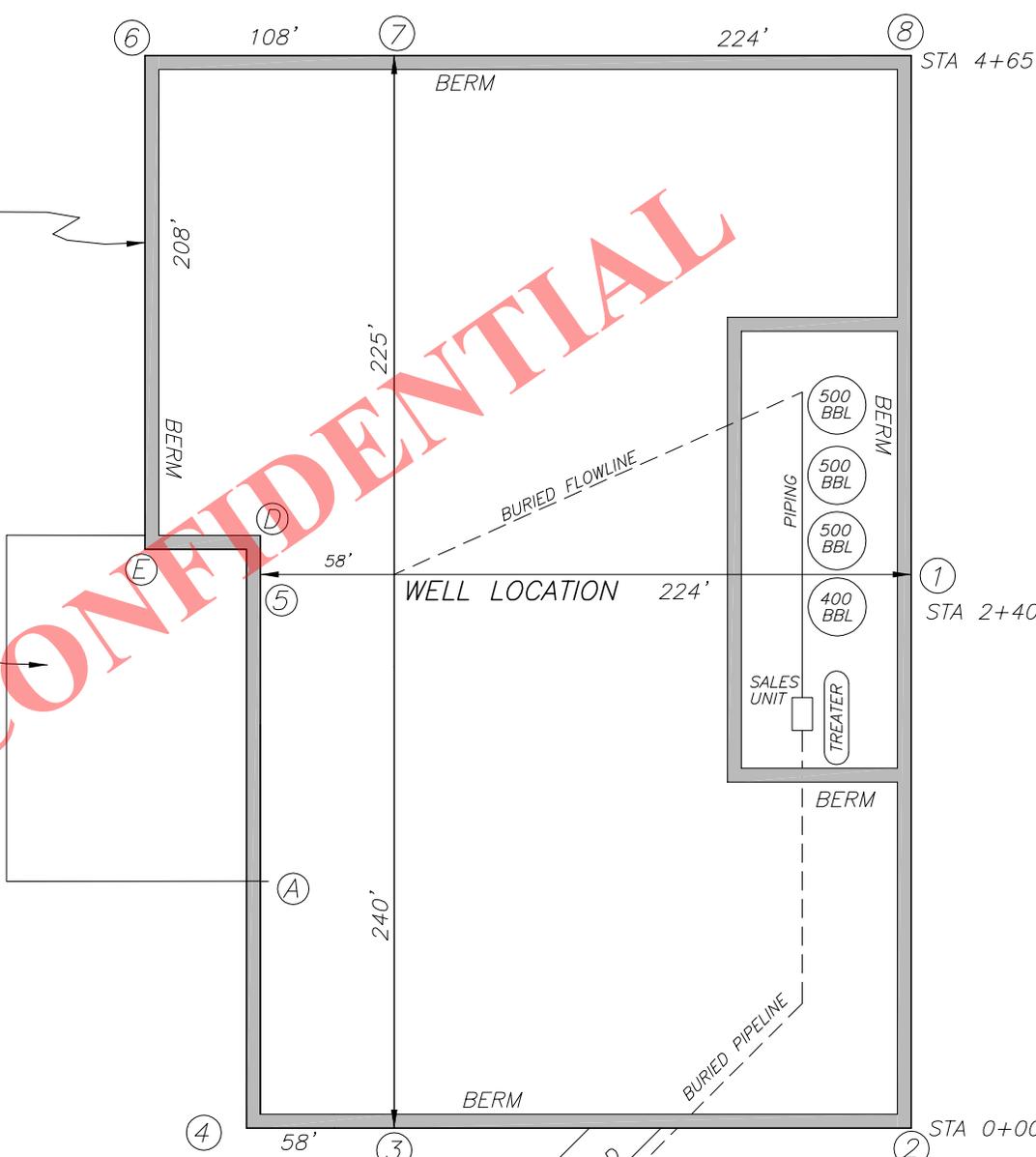


WELL PAD AREA  
BERMED AND USED  
FOR PRODUCTION

ENTIRE WELL PAD  
RECONTOURED BACK  
TO AVERAGE SLOPE  
FOR FINAL SURFACE  
RECLAMATION AFTER  
PRODUCTION

PIT AREA REGRADED  
BACK TO SLOPE FOR  
INTERIM RECLAMATION

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16 DEC 2013

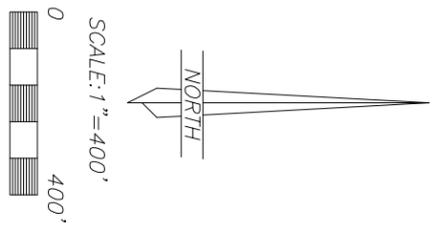
01-128-438

RECEIVED: April 07, 2014

N 00°16'08" W 2633.36'  
TO SECTION CORNER  
FOUND COUNTY  
MONUMENT AT  
QUARTER CORNER

N 00°23'18" W 2753.57'

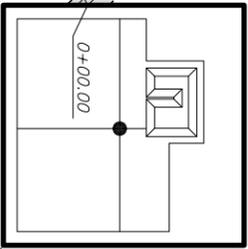
EXISTING ROAD  
PROPOSED 66' WIDE  
ACCESS ROAD, POWER  
LINE, AND PIPELINE  
CORRIDOR RIGHT-OF-WAY  
LOT 4  
D.W. BLUE BENCH  
LANDFILL PROPERTY



LINE	BEARING	DISTANCE
L1	N 89°59'41" W	525.00'
L2	N 00°00'19" E	525.00'
L3	S 89°59'41" E	525.00'
L4	S 00°00'19" W	525.00'
L5	N 44°59'45" W	593.80'
L6	S 89°59'40" W	979.59'

EP ENERGY E&P CO. L.P.  
SURFACE USE AREA  
DW LANDFILL 3-33B4  
6.33 ACRES

LOT 3  
D.W. BLUE BENCH  
LANDFILL PROPERTY



SEC 32 SEC 33 SEC 34 SEC 5  
FOUND COUNTY  
MONUMENT AT  
SECTION CORNER  
S 89°42'54" W 2649.34'  
FOUND REBAR AT  
QUARTER CORNER

LOCATION USE AREA AND ACCESS ROAD, POWER LINE, AND PIPELINE  
CORRIDOR RIGHT-OF-WAY SURVEY FOR  
**EP ENERGY E&P COMPANY, L.P.**  
**DW LANDFILL 3-33B4**  
SECTION 33, T2S, R4W, U.S.B.&M.  
DUCHESSNE COUNTY, UTAH

USE AREA BOUNDARY DESCRIPTION

Commencing at the South Quarter Corner of Section 33, Township 2 South, Range 4 West of the Uintah Special Base and Meridian;  
Thence North 52°16'31" West 884.62 feet to the TRUE POINT OF BEGINNING;  
Thence North 89°59'41" West 525.00 feet;  
Thence North 00°00'19" East 525.00 feet;  
Thence South 89°59'41" East 525.00 feet;  
Thence South 00°00'19" West 525.00 feet to the TRUE POINT OF BEGINNING, containing 6.33 acres.

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

A 66 feet wide access road, power line, and pipeline corridor right-of-way over portions of Section 33, Township 2 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 Southwest Corner of said Section 33;  
Thence North 62°36'07" East 1604.62 feet to the TRUE POINT OF BEGINNING, said point being on the West line of the EP Energy E&P Co. well location use area boundary;  
Thence North 44°59'45" West 593.80 feet;  
Thence South 89°59'40" West 979.59 feet to the East line of an existing road. Said right-of-way being 1573.39 feet in length with the side lines being shortened or elongated to intersect said use area boundary and existing road lines.

SURVEYOR'S CERTIFICATE

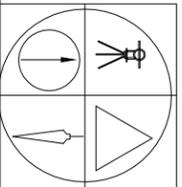
This is to certify that this plat was prepared from the field notes and electronic data collector files of an actual survey made by me, or under my personal supervision, of the use area and access road, power line, and pipeline corridor right-of-way shown hereon, and that the monuments indicated were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

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

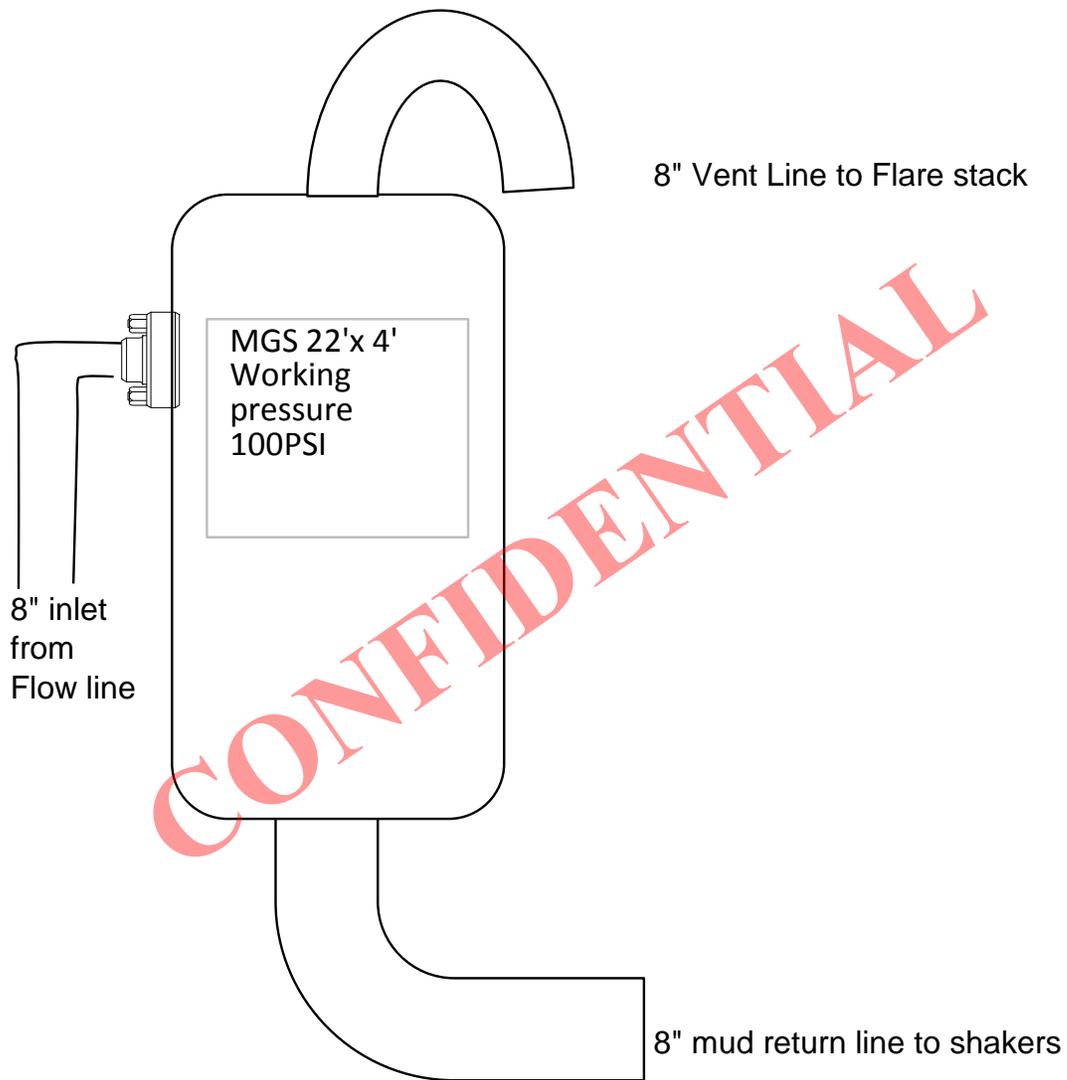
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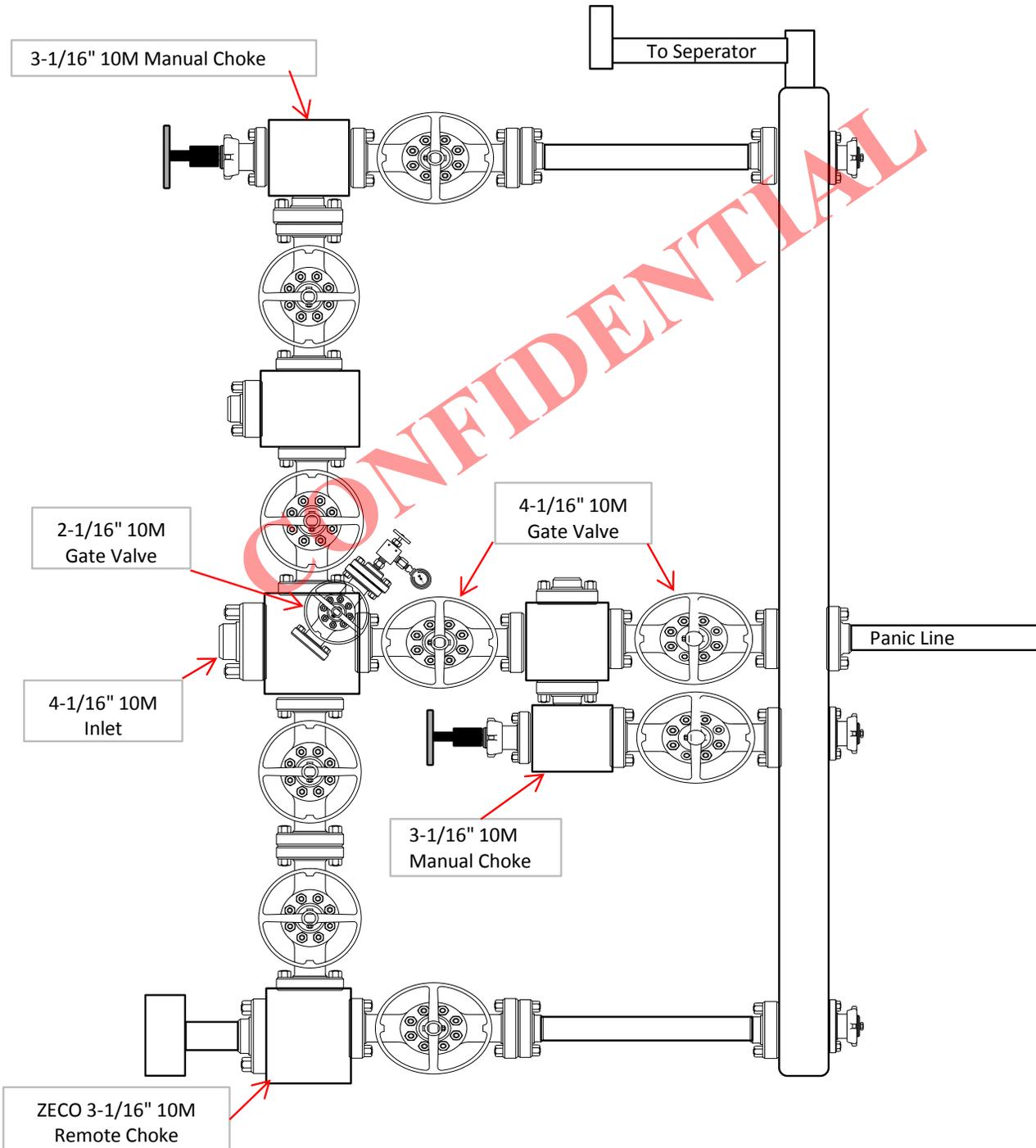
# Mud Gas Separator





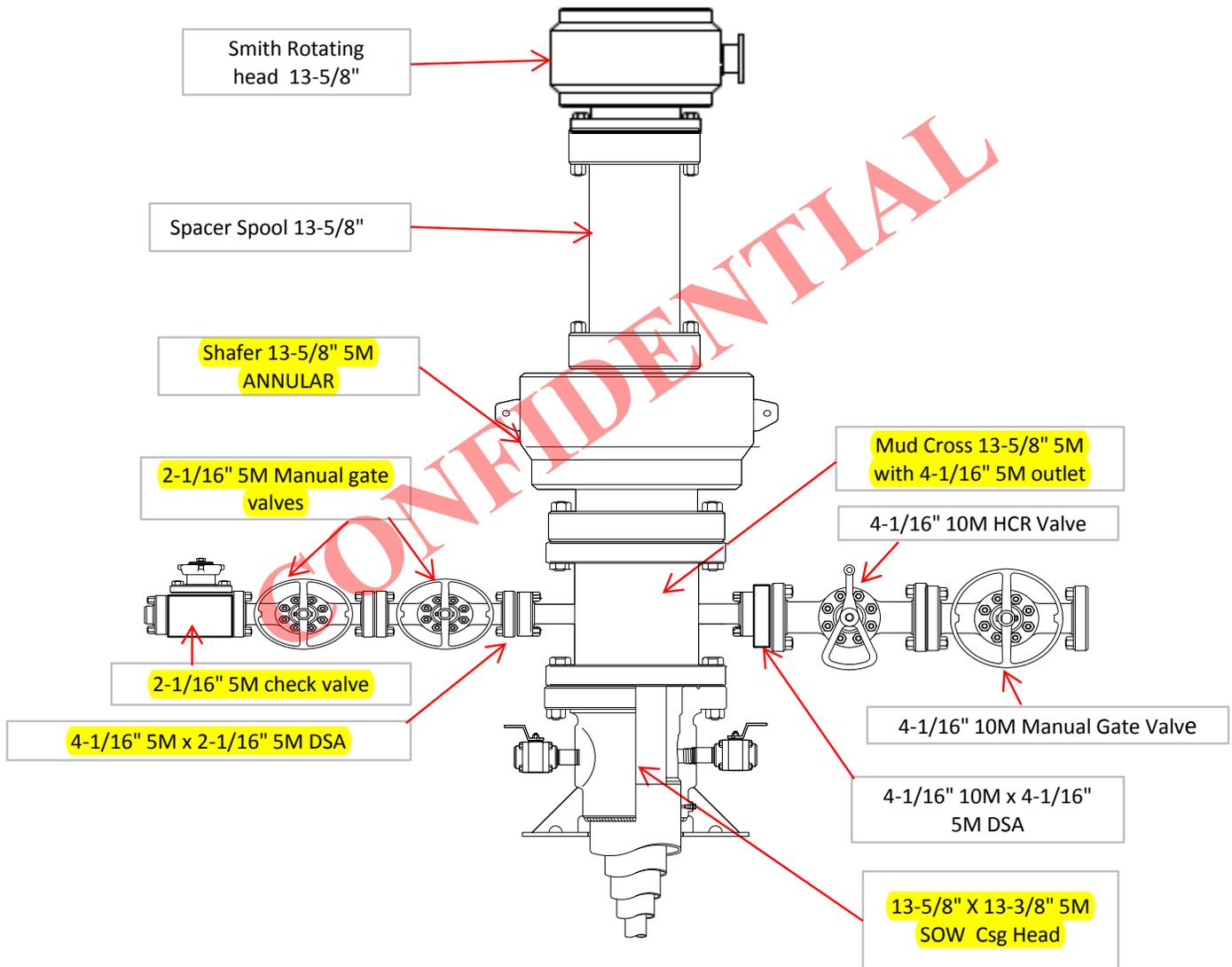
# 10M Choke Manifold Configuration

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



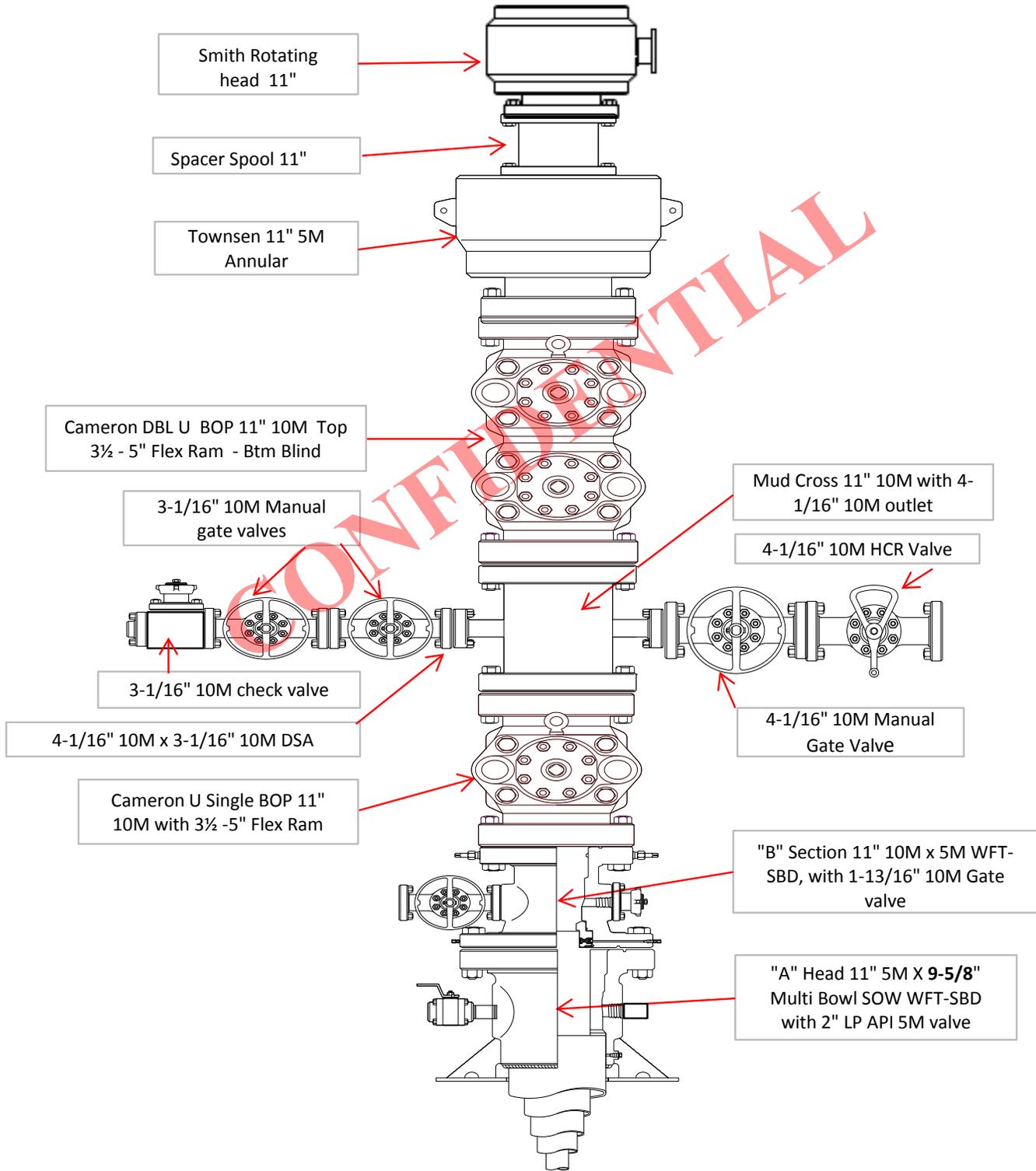


# Surface 13-5/8" 3M Diverter Configuration



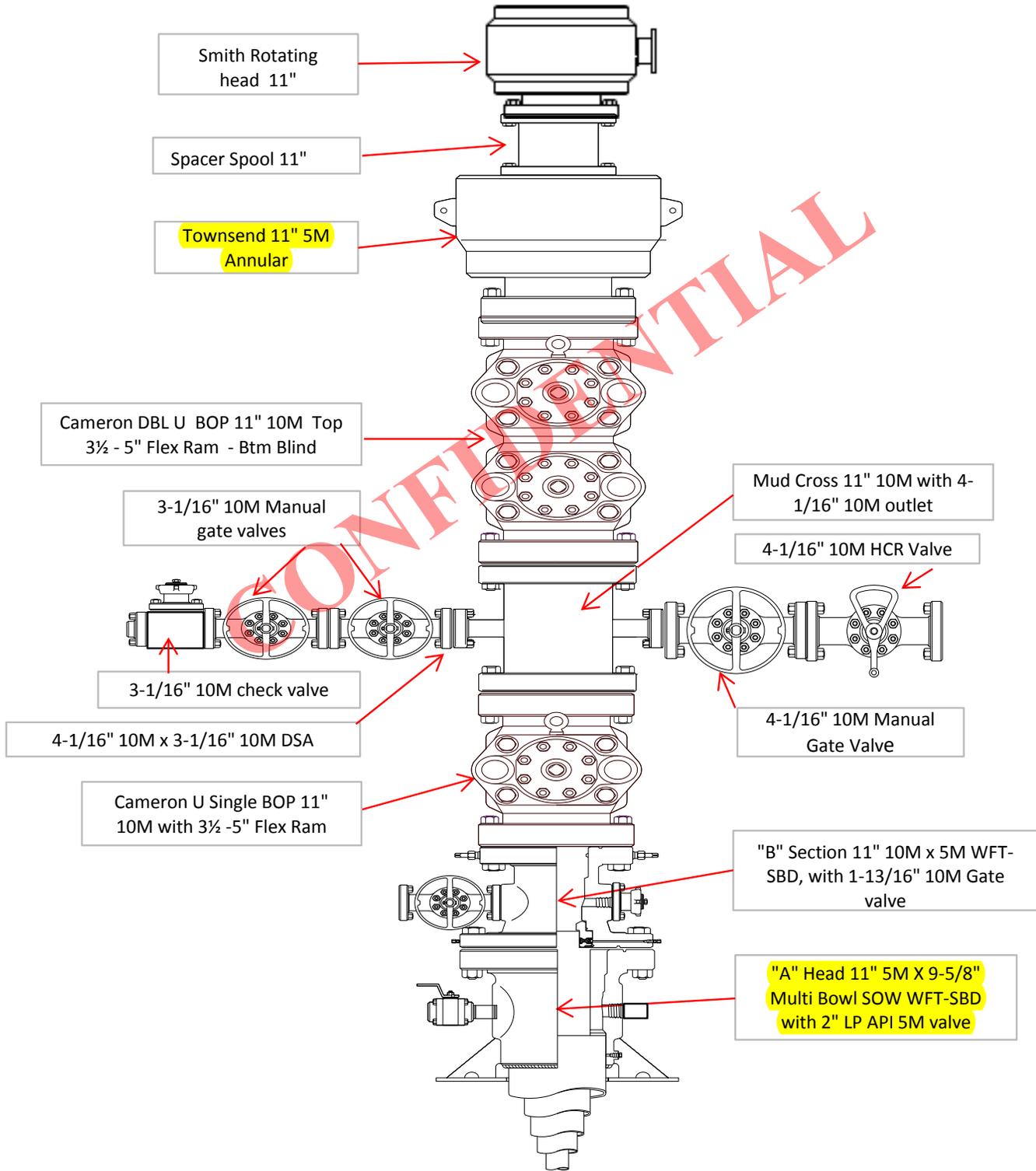


# Intermediate 11" 5M BOP Configuration





# Production 11" 10M BOP Configuration

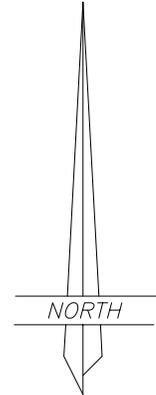
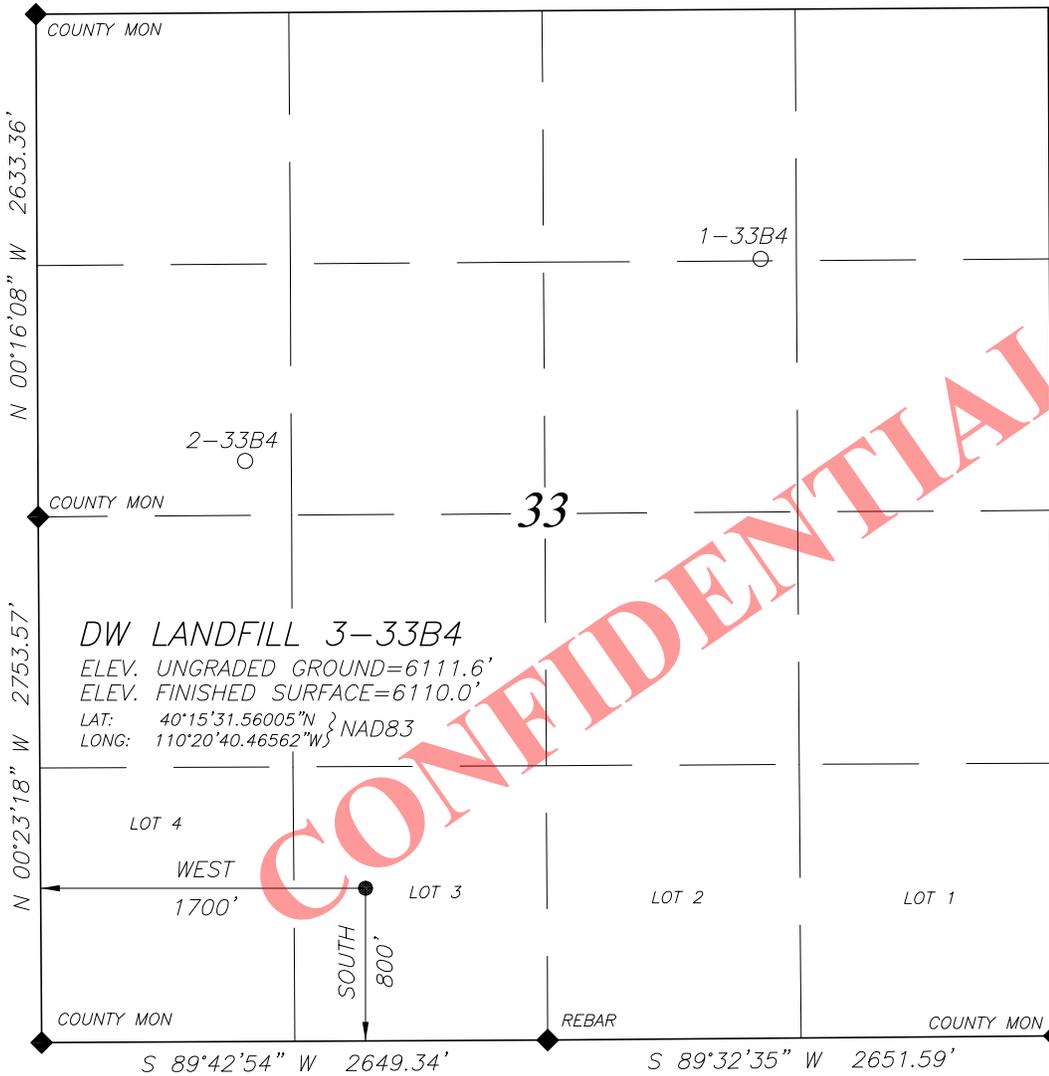


# EP ENERGY E&P COMPANY, L.P.

LOCATED IN LOT 3 OF  
SECTION 33, T2S, R4W, U.S.B.&M.  
DUCHESNE COUNTY, UTAH

## WELL LOCATION

### DW LANDFILL 3-33B4



SCALE: 1" = 1000'



NOTE:  
NAD27 VALUES FOR  
WELL POSITION:  
LAT: 40.25881053° N  
LONG: 110.34386270° W

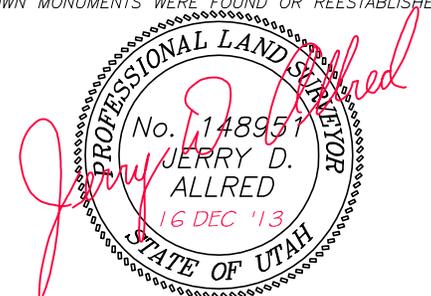
### SURVEYOR'S CERTIFICATE

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.

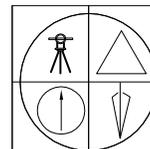
### LEGEND AND NOTES

- ◆ 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 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

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



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

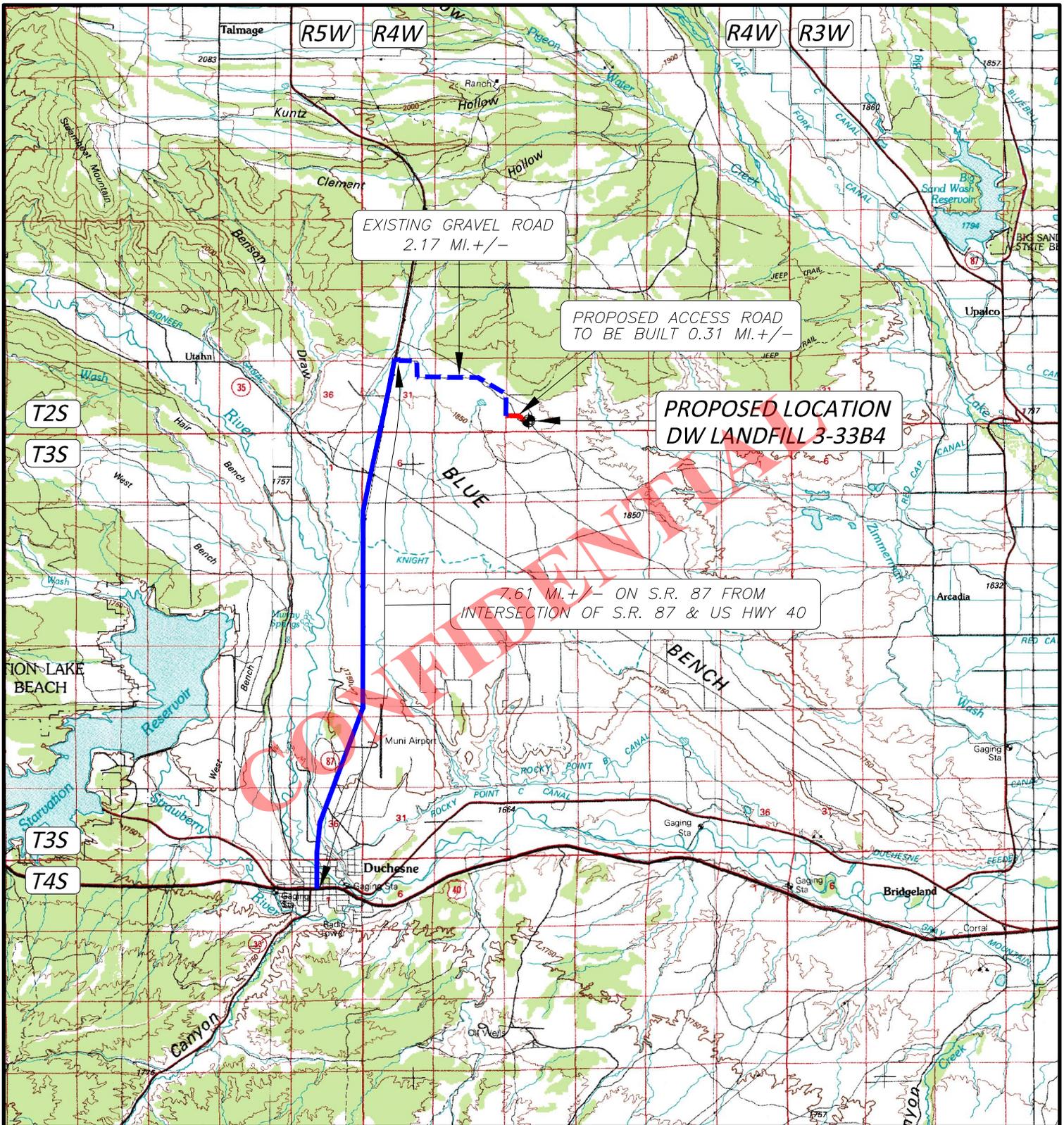


JERRY D. ALLRED & ASSOCIATES  
SURVEYING CONSULTANTS

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

16 DEC 2013 01-128-438

RECEIVED: April 07, 2014



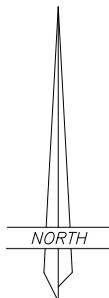
**LEGEND:**

● PROPOSED WELL LOCATION

01-128-438

**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

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



**EP ENERGY E&P COMPANY, L.P.**

DW LANDFILL 3-33B4

SECTION 33, T2S, R4W, U.S.B.&M.

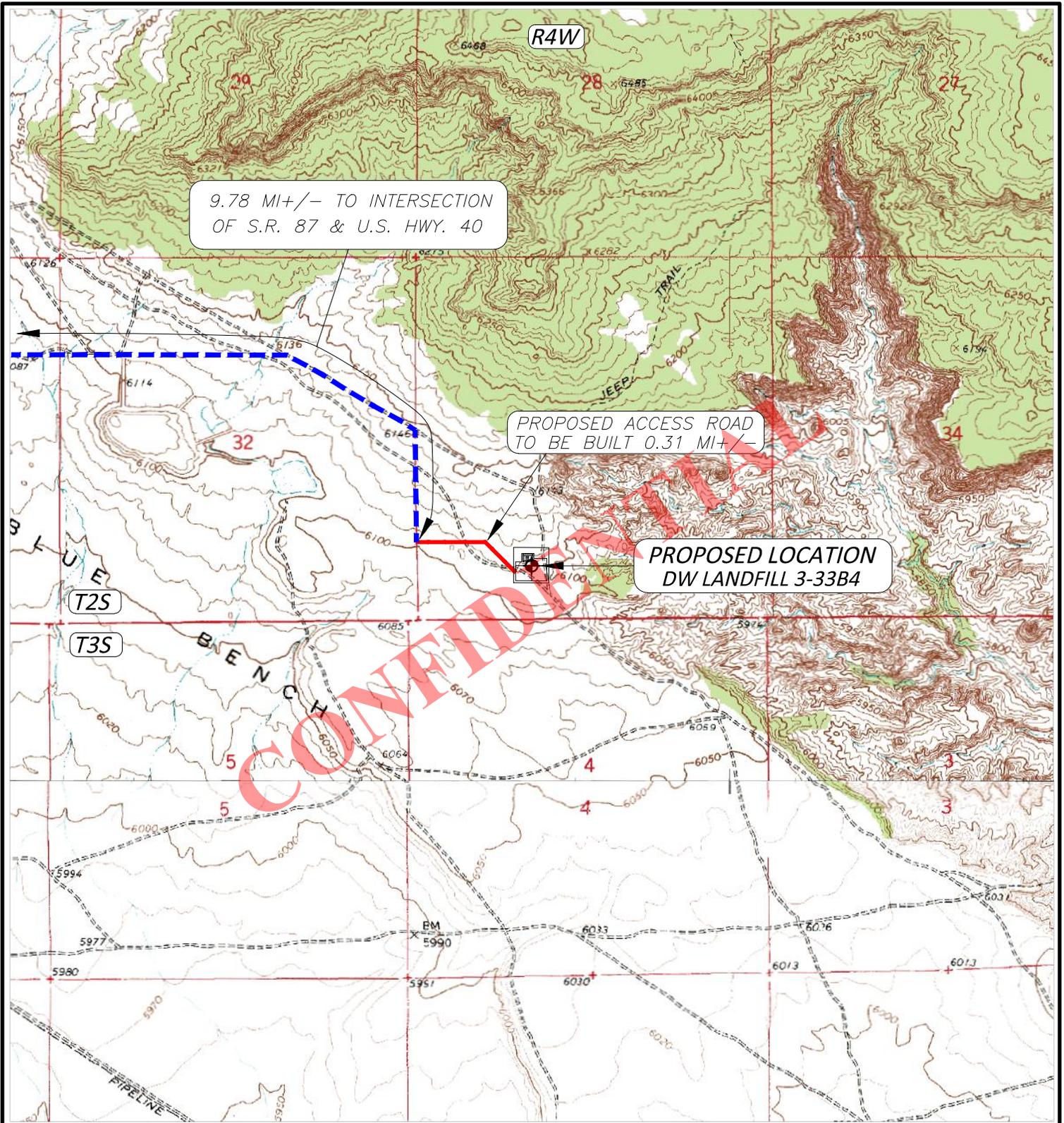
800' FSL 1700' FWL

**TOPOGRAPHIC MAP "A"**

SCALE; 1"=10,000'

4 NOV 2013

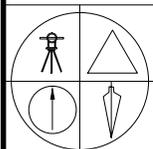
**RECEIVED:** April 07, 2014



**LEGEND:**

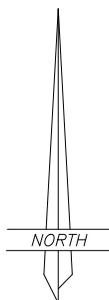
-  PROPOSED WELL LOCATION
-  PROPOSED ACCESS ROAD
-  EXISTING GRAVEL ROAD
-  EXISTING PAVED ROAD

01-128-438



**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

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



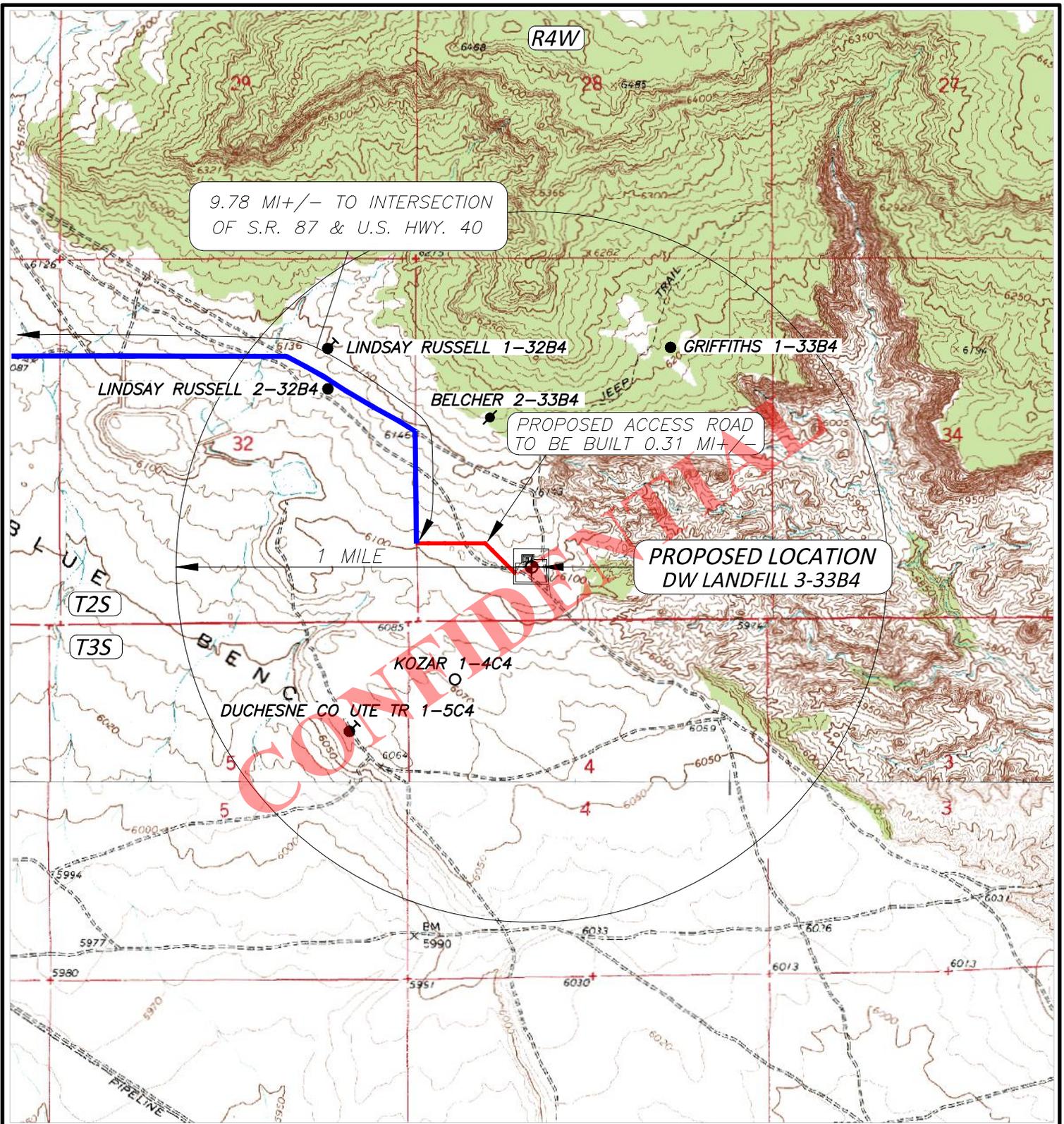
**EP ENERGY E&P COMPANY, L.P.**

DW LANDFILL 3-33B4  
SECTION 33, T2S, R4W, U.S.B.&M.

800' FSL 1700' FWL

**TOPOGRAPHIC MAP "B"**

SCALE: 1"=2000'  
4 NOV 2013



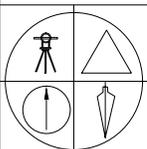
**LEGEND:**

◆ PROPOSED WELL LOCATION

2-25C6

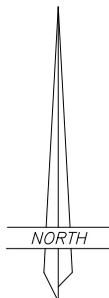
● ○ + ◆ ◐ ◑ ◒ ◓

01-128-438



**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

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



**EP ENERGY E&P COMPANY, L.P.**

DW LANDFILL 3-33B4  
SECTION 33, T2S, R4W, U.S.B.&M.

800' FSL 1700' FWL

**TOPOGRAPHIC MAP "C"**

SCALE; 1"=2000'  
4 NOV 2013

**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 DW Landfill 3-33B4 well (the "Well") to be located in Lot 3 (SESW) of Section 33, Township 2 South, Range 4 West, USM, Duchesne County, Utah (the "Drillsite Location"). The surface owner of the Drillsite Location is Duchesne/Wasatch Blue Bench Landfill Special Service District, whose address is P.O. Box 356, Duchesne, Utah 84021 (the "Surface Owner"). The Surface Owner's telephone number is (435) 822-2009.
3. EP Energy and the Surface Owner have entered into a Damage Settlement and Release Agreement dated January 29, 2014, 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 Lynch*  
 \_\_\_\_\_  
 Jacquelyn L. Lynch

CONFIDENTIAL

**ACKNOWLEDGMENT**

STATE OF TEXAS                   §  
   §  
 COUNTY OF HARRIS           §

Sworn to and subscribed before me on this 31<sup>st</sup> day of January, 2014, by Jacquelyn L. Lynch, as Landman for EP Energy E&P Company, L.P., a Delaware limited partnership.

*Ginger M. Cearley*  
 \_\_\_\_\_  
 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 .31 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 .31 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 15<sup>th</sup>, and prior to ground frost, or seed will be planted after the frost has left and before May 15<sup>th</sup>. 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:**

Duchesne/Wasatch Blue Bench Landfill  
P.O. Box 356  
Duchesne, Utah 84021  
435-822-2009

**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

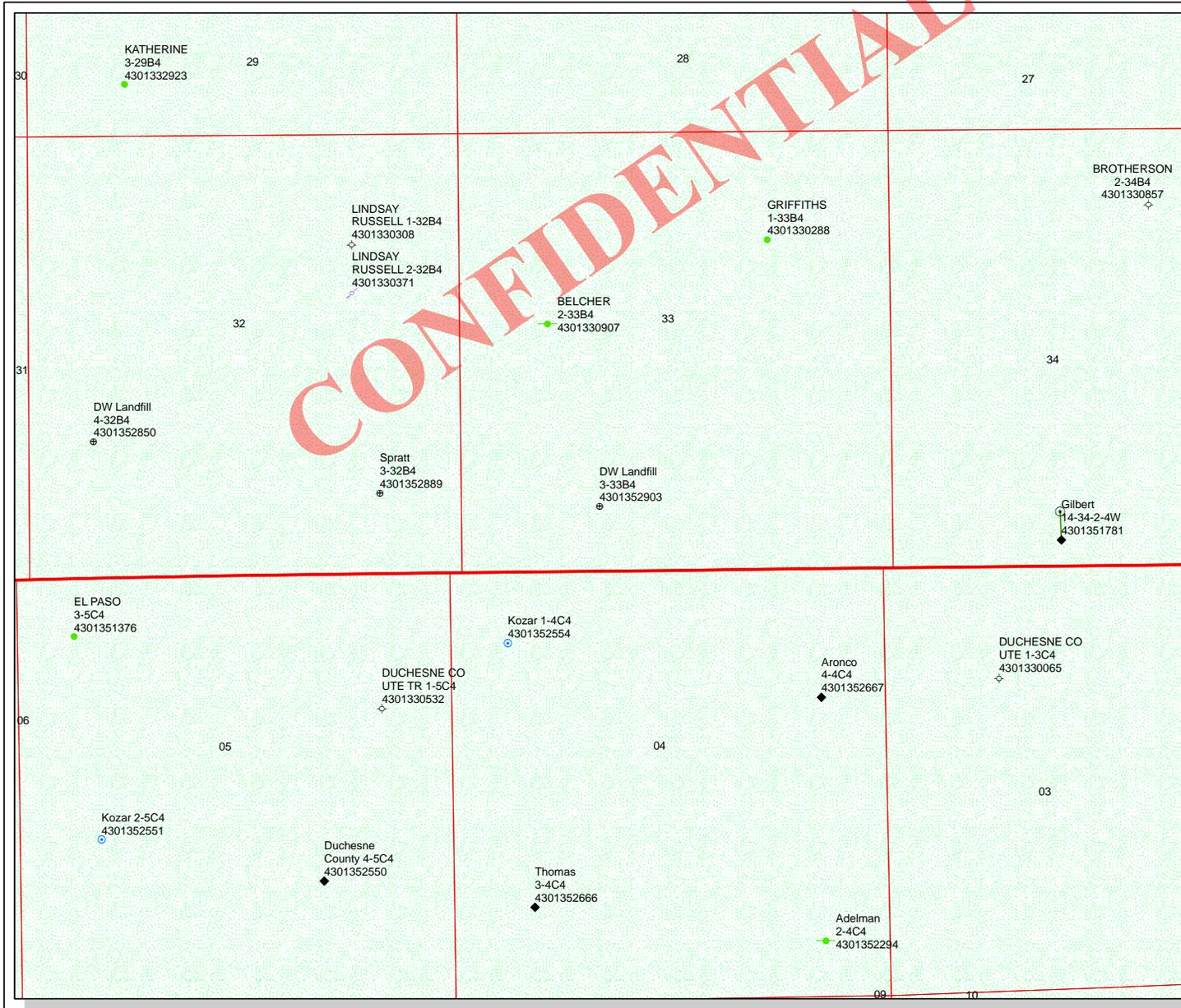
**Regarding This APD**

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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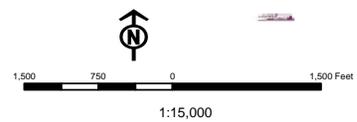
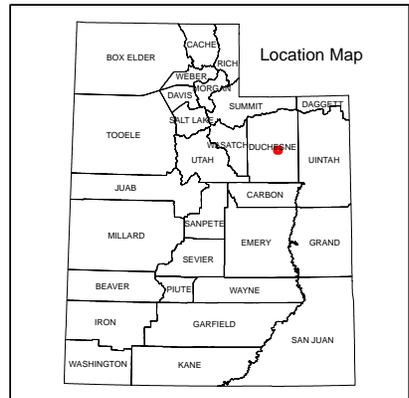


**API Number: 4301352903**  
**Well Name: DW Landfill 3-33B4**

Township: T02.0S Range: R04.0W Section: 33 Meridian: U  
 Operator: EP ENERGY E&P COMPANY, L.P.

Map Prepared: 4/9/2014  
 Map Produced by Diana Mason

Wells Query		Units	
Status		STATUS	
◆	APD - Approved Permit	□	ACTIVE
○	DRL - Spudded (Drilling Commenced)	□	EXPLORATORY
↗	GIW - Gas Injection	□	GAS STORAGE
★	GS - Gas Storage	□	NF PP OIL
⊕	LOC - New Location	□	NF SECONDARY
⊖	OPS - Operation Suspended	□	PI OIL
⊗	PA - Plugged Abandoned	□	PP GAS
⊙	PGW - Producing Gas Well	□	PP GEOTHERML
⊚	POW - Producing Oil Well	□	PP OIL
⊛	SGW - Shut-in Gas Well	□	SECONDARY
⊜	SOW - Shut-in Oil Well	□	TERMINATED
⊝	TA - Temp. Abandoned		
○	TW - Test Well	Fields	
⊖	WDW - Water Disposal	STATUS	
⊗	WW - Water Injection Well	□	Unknown
●	WSW - Water Supply Well	□	ABANDONED
		□	ACTIVE
		□	COMBINED
		□	INACTIVE
		□	STORAGE
		□	TERMINATED



# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** EP ENERGY E&P COMPANY, L.P.  
**Well Name** DW Landfill 3-33B4  
**API Number** 43013529030000      **APD No** 9551    **Field/Unit** ALTAMONT  
**Location: 1/4,1/4** SESW    **Sec** 33    **Tw** 2.0S    **Rng** 4.0W    800 FSL 1700 FWL  
**GPS Coord (UTM)** 555732 4456684      **Surface Owner** Duchesne/Wasatch

### Participants

Wayne Garner (EP Energy); Heather Ivie, Valery & Meagan (land people); Dennis Ingram (DOGM)

### Regional/Local Setting & Topography

The DW Landfill 3-33B4 is proposed 7.61 miles north of Duchesne along Highway 87, then east 2.17 miles along county road, then east for 0.31 miles into location staking. The topography at the well pad slopes southeasterly, having a proposed 4.7 foot cut at the northwestern corner and 5.6 feet of fill at the southeast stake. The surface is reddish blow-sand with some clays and has a sagebrush cover at the lower end of the cedar tree elevation. Regionally, this project is along the north/northwestern portion of Blue Bench and south of the red sandstone shelves that run some four miles easterly toward the Lake Fork River Drainage. Utahn and the Duchesne River corridor are found approximately 3.0 miles to the west.

### Surface Use Plan

#### **Current Surface Use**

Wildlfe Habitat  
Industrial

#### **New Road Miles**

0.31

#### **Well Pad**

**Width** 407    **Length** 465

#### **Src Const Material**

Onsite

#### **Surface Formation**

UNTA

**Ancillary Facilities** N

### Waste Management Plan Adequate?

### Environmental Parameters

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

Bunch grass, sagebrush prickly pear cactus;

Mule deer, coyote, fox, rabbit, smaller mammals and bird life native to region.

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

Reddish brown sandy loam with some clays

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

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

<b>Distance to Groundwater (feet)</b>	>200	0
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	>1320	0
<b>Native Soil Type</b>	High permeability	20
<b>Fluid Type</b>	Fresh Water	5
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>		0
<b>Affected Populations</b>		
<b>Presence Nearby Utility Conduits</b>	Unknown	10
<b>Final Score</b>		35    1 Sensitivity Level

**Characteristics / Requirements**

Proposed reserve pit on north side of 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**

Dropped plats by county landfill and invited same to onsite, does not effect their hundred year plan.

Dennis Ingram  
Evaluator

5/2/2014  
Date / Time

# Application for Permit to Drill Statement of Basis

## Utah Division of Oil, Gas and Mining

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Owner</b>	<b>CBM</b>
9551	43013529030000	LOCKED	OW	P	No
<b>Operator</b>	EP ENERGY E&P COMPANY, L.P.		<b>Surface Owner-APD</b>	Duchesne/Wasatch	
<b>Well Name</b>	DW Landfill 3-33B4		<b>Unit</b>		
<b>Field</b>	ALTAMONT		<b>Type of Work</b>	DRILL	
<b>Location</b>	SESW 33 2S 4W U 800 FSL 1700 FWL GPS Coord (UTM) 555732E 4456688N				

### Geologic Statement of Basis

The mineral rights for the proposed well are owned by the Ute Tribe. The BLM will be the agency responsible for evaluating and approving the drilling, casing and cement programs.

Brad Hill  
APD Evaluator

5/19/2014  
Date / Time

### Surface Statement of Basis

Surface slopes to the southeast, reserve pit in cut off the north side of location. There aren't any drainage issues related to this well pad; however, a two-track road runs south along the east side of the location and EP Energy plans to move it further east around corners number 6, 7, & 8. The operator shall install a 20 mil synthetic liner in the reserve pit to assist in containing drilling fluids. That pit should be fenced to keep wildlife or stock from entering. Topsoil should be placed northeast of the location between the reserve pit and corner number 6.

A presite was scheduled and performed on May 2, 2014 to take input and address issues regarding the construction and drilling of the DW Landfill 3-33B4. The county owns this land which is associated with the Duchesne County Landfill and have entered into a landowner agreement with EP Energy. Glen Murphy was invited to the presite and given a plat or cut and fill sheet showing this well location.

Dennis Ingram  
Onsite Evaluator

5/2/2014  
Date / Time

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

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 20 mils with a felt sub liner shall be properly installed and maintained in the reserve pit.
Pits	The reserve pit should be located on the north side of the location.
Surface	The well site shall be bermed to prevent fluids from entering or leaving the pad.

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 4/7/2014

API NO. ASSIGNED: 43013529030000

WELL NAME: DW Landfill 3-33B4

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

PHONE NUMBER: 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: SESW 33 020S 040W

Permit Tech Review: 

SURFACE: 0800 FSL 1700 FWL

Engineering Review: 

BOTTOM: 0800 FSL 1700 FWL

Geology Review: 

COUNTY: DUCHESNE

LATITUDE: 40.25880

LONGITUDE: -110.34462

UTM SURF EASTINGS: 555732.00

NORTHINGS: 4456688.00

FIELD NAME: ALTAMONT

LEASE TYPE: 2 - Indian

LEASE NUMBER: 14-20-H62-1746

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

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: INDIAN - RLB0009692
- 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

Commingling Approved

## LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 139-84
- Effective Date: 12/31/2008
- Siting: 4 Wells Per 640 Acres
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason  
5 - Statement of Basis - BHILL



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:** DW Landfill 3-33B4

**API Well Number:** 43013529030000

**Lease Number:** 14-20-H62-1746

**Surface Owner:** FEE (PRIVATE)

**Approval Date:** 5/20/2014

### 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 139-84. 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:

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

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

### Notification Requirements:

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

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

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

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

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

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

SESW S-33 T02S R04W

**EP Energy - DW Landfill 3-33B4 - API #43013529030000**

2 messages

LEASE 14-20-H62-1746

LANDRIG007 (Patterson 307) <LANDRIG007@epenergy.com>

Fri, Aug 1, 2014 at 7:39 AM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Evans, Perry (Contractor)" <Perry.Evans@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Morales, Lisa" <Lisa.Morales@epenergy.com>, "blm\_ut\_vn\_opreport@blm.gov" <blm\_ut\_vn\_opreport@blm.gov>, "m65lee@blm.gov (m65lee@blm.gov)" <m65lee@blm.gov>, "ut\_vn\_opreport@blm.gov" <ut\_vn\_opreport@blm.gov>

Please be advised Leon Ross drilling spudded the subject well on 7/31/14. We are currently drilling 17 1/2" hole with air rig. Plans are to run and cement 13 3/8" casing this afternoon. Further notification will be given when MIRU operations commence with drilling rig.

Regards,

Darryl Reeder

EP Energy

Patterson 307

Rig Office: 713-997-1255

**EP ENERGY**

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.

LANDRIG007 (Patterson 307) <LANDRIG007@epenergy.com>

Fri, Aug 1, 2014 at 7:54 AM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Evans, Perry (Contractor)" <Perry.Evans@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Morales, Lisa" <Lisa.Morales@epenergy.com>, "blm\_ut\_vn\_opreport@blm.gov" <blm\_ut\_vn\_opreport@blm.gov>, "m65lee@blm.gov (m65lee@blm.gov)" <m65lee@blm.gov>, "ut\_vn\_opreport@blm.gov" <ut\_vn\_opreport@blm.gov>

[Quoted text hidden]

CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

*SESU 5-33 TOQS R04W*

**DW LANDFILL 3-33B4 Run & cement surface casing**

1 message

**LANDRIG007 (Patterson 307)** <LANDRIG007@epenergy.com> Wed, Aug 13, 2014 at 3:48 PM

To: "blm\_ut\_vn\_opreport@blm.gov" <blm\_ut\_vn\_opreport@blm.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Evans, Perry (Contractor)" <Perry.Evans@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "m65lee@blm.gov (m65lee@blm.gov)" <m65lee@blm.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Morales, Lisa" <Lisa.Morales@epenergy.com>, "ut\_vn\_opreport@blm.gov" <ut\_vn\_opreport@blm.gov>, "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>

RE: EP ENERGY  
DW LANDFILL 3-33B4  
API # 43013529030000  
LEASE SERIAL # 14-20-H62-1746  
DUCHESNE CO., UTAH

We plan to cement 3,725' of 9 5/8" surface casing on the DW LANDFILL 3-33B4 well within 24hrs, probably overnight.

Regards,  
Eugene Parker  
Well site Supervisor  
Patterson 307  
713-997-1255

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
1420H621746

6. If Indian, Allottee or Tribe Name

1a. Type of Work:  DRILL  REENTER

**CONFIDENTIAL**

7. If Unit or CA Agreement, Name and No.  
CA UTU 58823

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

8. Lease Name and Well No.  
DW LANDFILL 3-33B4

2. Name of Operator  
EL PASO E&P COMPANY LP

Contact: MARIA GOMEZ  
E-Mail: maria.gomez@epenergy.com

9. API Well No.  
43-013-52903-00-X1

3a. Address  
1001 LOUISIANA  
HOUSTON, TX 77002

3b. Phone No. (include area code)  
Ph: 713-997-5038

10. Field and Pool, or Exploratory  
ALTAMONT

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

At surface SESW 800FSL 1700FWL  
At proposed prod. zone SESW 800FSL 1700FWL

11. Sec., T., R., M., or Blk. and Survey or Area  
Sec 33 T2S R4W Mer UBM

14. Distance in miles and direction from nearest town or post office\*

12. County or Parish  
DUCHESNE

13. State  
UT

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  
800

16. No. of Acres in Lease  
237.00

17. Spacing Unit dedicated to this well  
640.00

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.  
1700

19. Proposed Depth  
13200 MD  
13200 TVD

20. BLM/BIA Bond No. on file  
RLB0009692

21. Elevations (Show whether DF, KB, RT, GL, etc.)  
6110 GL

22. Approximate date work will start  
08/05/2014

23. Estimated duration  
60

24. Attachments

AUG 11 2014

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

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

DIV. OF OIL, GAS & MINING

RECEIVED

25. Signature (Electronic Submission) Name (Printed/Typed) MARIA GOMEZ Ph: 713-997-5038 Date 06/23/2014

Title  
AUTHORIZED REPRESENTATIVE

Approved by (Signature) Name (Printed/Typed) NATHAN PACKER Date 7/28/14

Title ACTING Assistant Field Manager Office VERNAL FIELD OFFICE

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

**CONDITIONS OF APPROVAL ATTACHED**

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

Additional Operator Remarks (see next page)

Electronic Submission #250434 verified by the BLM Well Information System  
For EL PASO E&P COMPANY LP, sent to the Vernal  
Committed to AFMSS for processing by JEANNE NEWMAN on 06/24/2014 ()

NOTICE OF APPROVAL

UDOGM

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

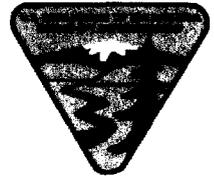


UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: EL PASO E&P COMPANY LP  
Well No: DW LANDFILL 3-33B4  
API No: 43-013-52903

Location: SESW, Sec. 33, T2S, R4W  
Lease No: 14-20-H62-1745  
Agreement: N/A

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

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

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

**NOTIFICATION REQUIREMENTS**

Construction Activity  
(Notify Ute Tribe Energy & Minerals  
Dept. and BLM Environmental  
Scientist)

- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.

Construction Completion  
(Notify Ute Tribe Energy & Minerals  
Dept. and BLM Environmental  
Scientist)

- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.

Spud Notice  
(Notify BLM Petroleum Engineer)

- Twenty-Four (24) hours prior to spudding the well.

Casing String & Cementing  
(Notify BLM Supv. Petroleum Tech.)

- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: [blm\\_ut\\_vn\\_opreport@blm.gov](mailto:blm_ut_vn_opreport@blm.gov).

BOP & Related Equipment Tests  
(Notify BLM Supv. Petroleum Tech.)

- Twenty-Four (24) hours prior to initiating pressure tests.

First Production Notice  
(Notify BLM Petroleum Engineer)

- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**Well Number: DW Landfill 3-33B4**

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COA's)**

- Paint all production facilities and equipment, not otherwise regulated (OSHA, etc.), Juniper Green.
- All areas of disturbance (including surface pipelines) must have appropriate surface use agreements or approvals in place with the proper owner and/or agency before such action is started.
- The conditions of approval, as set forth by those owners and/or agencies, shall be adhered to.
- Stationary internal combustion engines would comply with the following emission standards: 2 g/bhp-hr of NO<sub>x</sub> for engines less than 300 HP and 1 g/bhp-hr of NO<sub>x</sub> for engines over 300 HP.
- Either no or low bleed controllers would be installed on pneumatic pumps, actuators or other pneumatic devices.
- VOC venting controls or flaring would be utilized for oil or gas atmospheric storage tanks.
- VOC venting controls or flaring would be used for glycol dehydration and amine units.
- Where feasible, green completion would be used for well completion, re-completion, venting, or planned blowdown emissions. Alternatively, use controlled VOC emissions methods with 90% efficiency.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- DW Landfill 3-33B4 - High Priority, witness cementing of surface casing to ensure returns to surface.
- Site Specific COA's
- 1. A formation integrity test shall be performed at the surface casing shoe.
- 2. CBL shall be run from Int' Casing bottom to TOC

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

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

SLSU 5-33 TO2S R04W

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## DW LANDFILL 3-33B4 Diverter test

1 message

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LANDRIG007 (Patterson 307) <LANDRIG007@epenergy.com> Sun, Aug 10, 2014 at 12:10 PM  
To: "blm\_ut\_vn\_opreport@blm.gov" <blm\_ut\_vn\_opreport@blm.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Evans, Perry (Contractor)" <Perry.Evans@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "m65lee@blm.gov (m65lee@blm.gov)" <m65lee@blm.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Morales, Lisa" <Lisa.Morales@epenergy.com>, "ut\_vn\_opreport@blm.gov" <ut\_vn\_opreport@blm.gov>, "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>

RE: EP ENERGY  
DW LANDFILL 3-33B4  
API # 43013529030000  
LEASE SERIAL # 14-20-H62-1746  
DUCHESNE CO., UTAH

We plan to test 13 5/8" Diverter on the DW LANDFILL 3-33B4 well within 24hrs, probably overnight.

Regards,  
Eugene Parker  
Well site Supervisor  
Patterson 307  
713-997-1255

---

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Carol Daniels <caroldaniels@utah.gov>

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**DW LANDFILL 3-33B4. Spudded 12 1/4" hole.**

1 message

---

**LANDRIG007 (Patterson 307)** <LANDRIG007@epenergy.com> Mon, Aug 11, 2014 at 11:16 AM  
To: "blm\_ut\_vn\_opreport@blm.gov" <blm\_ut\_vn\_opreport@blm.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Evans, Perry (Contractor)" <Perry.Evans@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "m65lee@blm.gov (m65lee@blm.gov)" <m65lee@blm.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Morales, Lisa" <Lisa.Morales@epenergy.com>, "ut\_vn\_opreport@blm.gov" <ut\_vn\_opreport@blm.gov>, "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>

RE: EP ENERGY  
DW LANDFILL 3-33B4  
API # 43013529030000  
LEASE SERIAL # 14-20-H62-1746  
DUCHESNE CO., UTAH

We began drilling 12 1/4" hole on DW LANDFILL 3-33B4 well at 605', 1100 HOURS, 08/11/2014.

Regards,  
Eugene Parker  
Well site Supervisor  
Patterson 307  
713-997-1255

---

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CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

SESW 5-33 TOAS ROYU LEASE 14-20-H62-17-46

**EP Energy - DW Landfill 3-33B4 - API # 43013529030000**

1 message

LANDRIG007 (Patterson 307) <LANDRIG007@epenergy.com>

Sun, Aug 24, 2014 at 9:08 AM

To: "ut\_vn\_opreport@blm.gov" <ut\_vn\_opreport@blm.gov>, "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, Dan Jarvis <danjarvis@utah.gov>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Evans, Perry (Contractor)" <Perry.Evans@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "Morales, Lisa" <Lisa.Morales@epenergy.com>

Please be advised current operations is running 7" intermediate casing. Plans are to run and cement 7" casing. This serves as 24hr notice to test BOPE and casing. If questions arise please don't hesitate to call.

Darryl Reeder - WSS

EP Energy

Patterson 307

Rig Office: 713-997-1255

**EP ENERGY**

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<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-1746
---	--

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7. UNIT or CA AGREEMENT NAME:</b>
--	---

<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> DW Landfill 3-33B4
------------------------------------	---

<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.	<b>9. API NUMBER:</b> 43013529030000
--	---

<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana , Houston, TX, 77002	<b>PHONE NUMBER:</b> 713 997-5038 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
---	--	--

<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1700 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 33 Township: 02.0S Range: 04.0W Meridian: U	<b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH
---	---

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 9/19/2014  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION 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 Wasatch. Please see attached.

**Approved by the**  
**September 15, 2014**  
**Oil, Gas and Mining**

**Date:** \_\_\_\_\_

**By:** Dark Quif

<b>NAME (PLEASE PRINT)</b> Maria S. Gomez	<b>PHONE NUMBER</b> 713 997-5038	<b>TITLE</b> Principal Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/15/2014	

## **DW Landfill 3-33B4**

### **Initial Completion**

**API # : 43013529030000**

**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 5" casing from the 7" after the frac.
6. 2 7/8" tubing will be run to isolate the 7" 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)**

- |                 |  |
|-----------------|--|
| <b>Stage #1</b> | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~12445' – 12796' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of Power Prop 20/40. Total clean water volume is 128360 gals. |
| <b>Stage #2</b> | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~12088' – 12414' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of Power Prop 20/40. Total clean water volume is 127828 gals. |
| <b>Stage #3</b> | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11765' – 12043' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~140000 # of Power Prop 20/40. Total clean water volume is 120779 gals. |
| <b>Stage #4</b> | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11486' – 11734' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~160000 # of Power Prop 20/40. Total clean water volume is 133496 gals. |
| <b>Stage #5</b> | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11165' – 11435' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~160000 # of Power Prop 20/40. Total clean water volume is 133017 gals. |

**Stage #6** RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~10898' – 11129' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~160000 # of Power Prop 20/40. Total clean water volume is 132619 gals.

**Stage #7** RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~10560' – 10859' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of Power Prop 20/40. Total clean water volume is 125548 gals.

### 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%)	Gals of Clean H2O	Gals of Slurry
Stage #1	12,445	12,796	351	NA	23	69	17	Power Prop 20/40	150,000	427	3,000	5,000	128,360	3,450
Stage #2	12,088	12,414	326	12,429	23	69	17	Power Prop 20/40	150,000	460	3,000	5,000	127,828	3,437
Stage #3	11,765	12,043	278	12,058	21	63	17	Power Prop 20/40	140,000	504	3,000	5,000	120,779	3,251
Stage #4	11,486	11,734	248	11,749	21	63	15	Power Prop 20/40	160,000	645	3,000	5,000	133,496	3,590
Stage #5	11,165	11,435	270	11,450	23	69	17	Power Prop 20/40	160,000	593	3,000	5,000	133,017	3,579
Stage #6	10,898	11,129	231	11,144	22	66	17	Power Prop 20/40	160,000	693	3,000	5,000	132,619	3,569
Stage #7	10,560	10,859	299	10,874	23	69	17	Power Prop 20/40	150,000	502	3,000	5,000	125,548	3,383
Stage #8	10,267	10,532	265	10,547	23	69	17	TLC 20/40	140,000	528	3,000	5,000	118,544	3,205
<b>Average per Stage</b>			<b>284</b>		<b>22</b>	<b>67</b>	<b>17</b>		<b>151,250</b>	<b>544</b>	<b>3,000</b>	<b>5,000</b>	<b>127,524</b>	<b>3,433</b>
<b>Totals per Well</b>			<b>2,268</b>		<b>179</b>	<b>537</b>	<b>134</b>		<b>1,210,000</b>		<b>24,000</b>	<b>40,000</b>	<b>1,020,191</b>	<b>27,463</b>

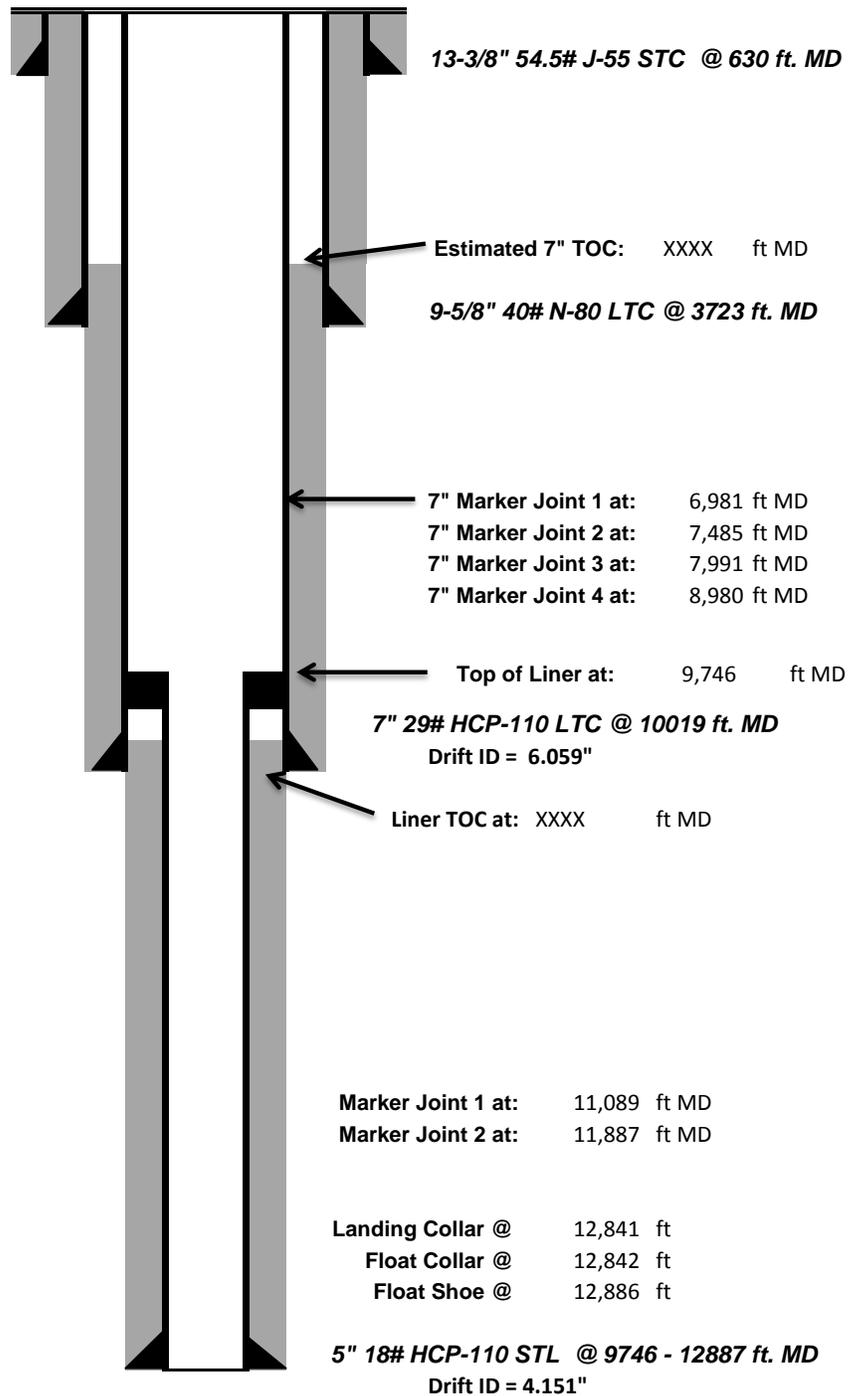


**Pre-Completion Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **9/15/2014**  
 By: **Jarrod Kent**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **159947**

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



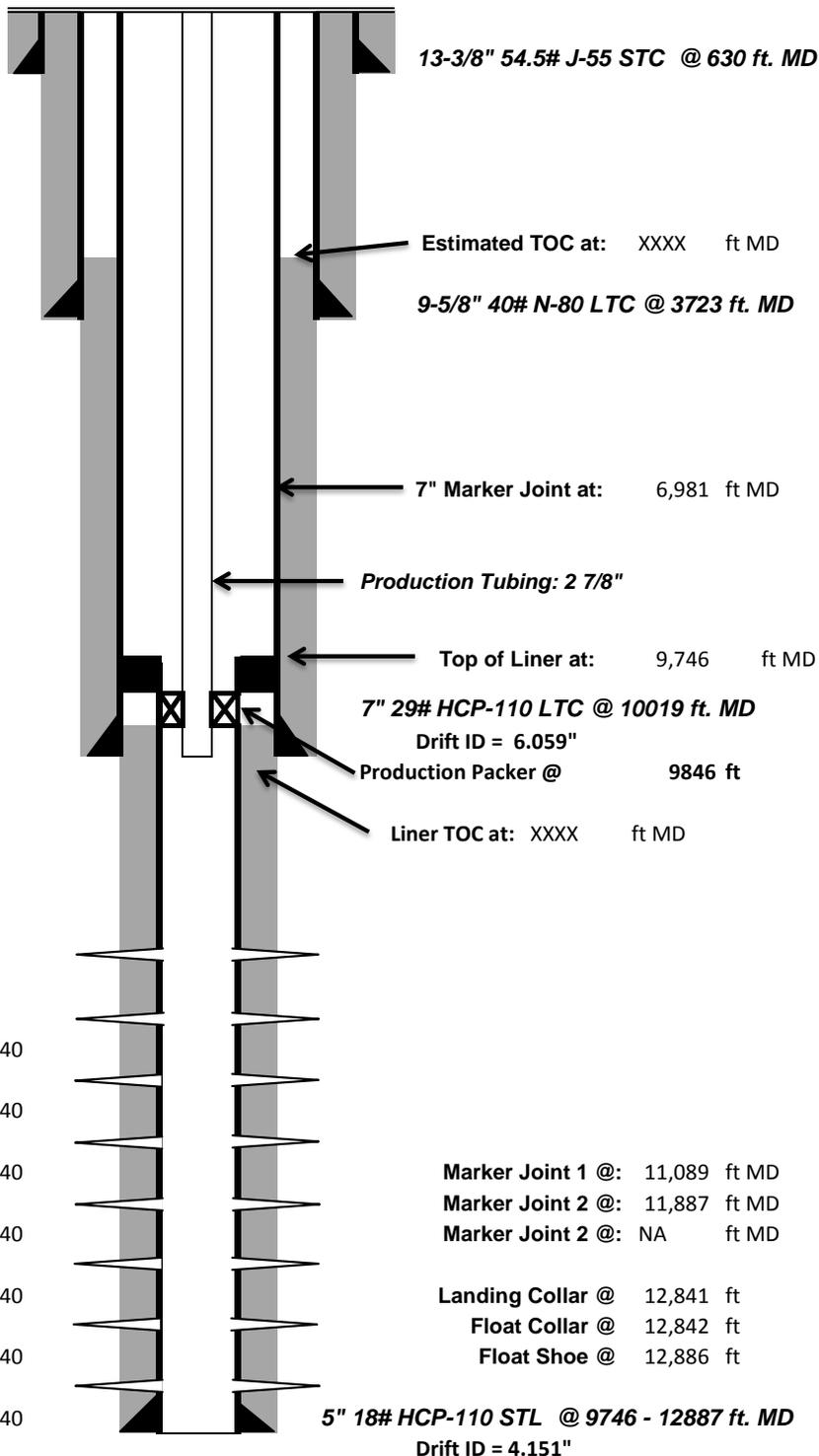


**Post-Completion Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **9/15/2014**  
 By: **Jarrold Kent**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **159947**

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



**Initial Completion Perf Information**

- Stage #8** 10267 - 10532 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10560 - 10859 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #6** 10898 - 11129 22' /66 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #5** 11165 - 11435 23' /69 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #4** 11486 - 11734 21' /63 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #3** 11765 - 12043 21' /63 shots  
5000 gal HCL & 140000 lbs Power Prop 20/40
- Stage #2** 12088 - 12414 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12445 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40

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

AMENDED REPORT  FORM 8  
(highlight changes)

<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>		5. LEASE DESIGNATION AND SERIAL NUMBER:
1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
b. TYPE OF WORK: NEW WELL <input type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME
2. NAME OF OPERATOR:		8. WELL NAME and NUMBER:
3. ADDRESS OF OPERATOR: CITY _____ STATE _____ ZIP _____ PHONE NUMBER: _____		9. API NUMBER:
4. LOCATION OF WELL (FOOTAGES) AT SURFACE:  AT TOP PRODUCING INTERVAL REPORTED BELOW:  AT TOTAL DEPTH:		10 FIELD AND POOL, OR WILDCAT
		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
		12. COUNTY _____ 13. STATE <b>UTAH</b>

14. DATE SPUDDED:	15. DATE T.D. REACHED:	16. DATE COMPLETED: _____ ABANDONED <input type="checkbox"/> READY TO PRODUCE <input type="checkbox"/>	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 MD _____ PLUG SET: TVD _____
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)		23. WAS WELL CORED? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input type="checkbox"/> (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					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								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.	30. WELL STATUS:
<input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> GEOLOGIC REPORT <input type="checkbox"/> DST REPORT <input type="checkbox"/> DIRECTIONAL SURVEY <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION <input type="checkbox"/> CORE ANALYSIS <input type="checkbox"/> OTHER: _____	

**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 October 24, 2014****Well Name: DW Landfill 3-33B4****Items #27 and #28 Continued****27. Perforation Record**

<b>Interval (Top/Bottom – MD)</b>	<b>Size</b>	<b>No. of Holes</b>	<b>Perf. Status</b>
<b>11157'-11429'</b>	<b>.43</b>	<b>69</b>	<b>Open</b>
<b>10888'-11121'</b>	<b>.43</b>	<b>66</b>	<b>Open</b>
<b>10547'-10850'</b>	<b>.43</b>	<b>69</b>	<b>Open</b>
<b>10255'-10521'</b>	<b>.43</b>	<b>69</b>	<b>Open</b>

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

<b>Depth Interval</b>	<b>Amount and Type of Material</b>
<b>11480'-11731'</b>	<b>5000 gal acid, 3100# 100 mesh, 160240# 20/40 PowerProp</b>
<b>11157'-11429'</b>	<b>5000 gal acid, 3100# 100 mesh, 160440# 20/40 PowerProp</b>
<b>10888'-11121'</b>	<b>5000 gal acid, 3000# 100 mesh, 160180# 20/40 PowerProp</b>
<b>10547'-10850'</b>	<b>5000 gal acid, 3200# 100 mesh, 149220# 20/40 PowerProp</b>
<b>10255'-10521'</b>	<b>5000 gal acid, 3200# 100 mesh, 140290# 20/40 TLC</b>



**Company:** EP Energy  
**Well:** DW Landfill 3-33B4  
**Location:** Duchesne, UT  
**Rig:** Patterson 307

**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					
<b>Tie In</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>												
1	100.00	0.30	287.86	100.00	100.00	0.08	0.08	N	0.25	W	0.27	287.86	0.30	0.30	287.86
2	200.00	0.34	220.30	100.00	200.00	-0.06	0.06	S	0.69	W	0.70	264.99	0.36	0.03	-67.56
3	300.00	0.73	187.65	100.00	299.99	-0.92	0.92	S	0.97	W	1.34	226.55	0.49	0.40	-32.65
4	400.00	0.36	153.13	100.00	399.99	-1.83	1.83	S	0.91	W	2.05	206.47	0.48	-0.37	-34.53
5	500.00	0.49	205.28	100.00	499.99	-2.50	2.50	S	0.95	W	2.68	200.88	0.39	0.13	52.15
6	600.00	0.79	167.25	100.00	599.98	-3.56	3.56	S	0.99	W	3.70	195.47	0.50	0.30	-38.03
7	700.00	0.68	181.51	100.00	699.97	-4.82	4.82	S	0.85	W	4.90	189.99	0.21	-0.11	14.26
8	800.00	0.56	219.94	100.00	799.97	-5.78	5.78	S	1.18	W	5.90	191.50	0.42	-0.12	38.43
9	900.00	0.72	234.22	100.00	899.96	-6.52	6.52	S	2.00	W	6.82	197.03	0.23	0.16	14.28
10	1000.00	0.78	197.86	100.00	999.95	-7.54	7.54	S	2.72	W	8.01	199.82	0.47	0.06	-36.36
11	1100.00	0.68	239.16	100.00	1099.95	-8.49	8.49	S	3.43	W	9.16	202.02	0.52	-0.10	41.30
12	1200.00	0.40	261.35	100.00	1199.94	-8.85	8.85	S	4.29	W	9.83	205.87	0.34	-0.27	22.19
13	1300.00	0.46	236.52	100.00	1299.94	-9.12	9.12	S	4.98	W	10.39	208.62	0.20	0.06	-24.83
14	1400.00	0.79	260.76	100.00	1399.93	-9.46	9.46	S	6.00	W	11.20	212.38	0.42	0.33	24.25
15	1500.00	0.62	266.84	100.00	1499.92	-9.60	9.60	S	7.22	W	12.01	216.95	0.19	-0.18	6.08
16	1600.00	0.82	244.07	100.00	1599.92	-9.94	9.94	S	8.40	W	13.01	220.20	0.35	0.20	-22.77
17	1700.00	0.70	238.42	100.00	1699.91	-10.57	10.57	S	9.56	W	14.25	222.13	0.14	-0.12	-5.66
18	1800.00	0.46	195.10	100.00	1799.90	-11.28	11.28	S	10.19	W	15.20	222.09	0.48	-0.24	-43.32
19	1900.00	0.69	250.62	100.00	1899.90	-11.86	11.86	S	10.86	W	16.08	222.47	0.57	0.23	55.52
20	2000.00	0.47	221.58	100.00	1999.89	-12.37	12.37	S	11.70	W	17.02	223.41	0.36	-0.22	-29.04
21	2100.00	0.40	242.14	100.00	2099.89	-12.83	12.83	S	12.27	W	17.76	223.72	0.17	-0.07	20.56
22	2200.00	0.35	227.62	100.00	2199.89	-13.20	13.20	S	12.81	W	18.39	224.13	0.10	-0.04	-14.52
23	2300.00	0.64	213.30	100.00	2299.89	-13.88	13.88	S	13.34	W	19.25	223.87	0.31	0.29	-14.32
24	2400.00	0.61	218.30	100.00	2399.88	-14.76	14.76	S	13.98	W	20.33	223.44	0.06	-0.03	5.00
25	2500.00	0.60	215.29	100.00	2499.87	-15.60	15.60	S	14.61	W	21.37	223.11	0.03	-0.01	-3.01
26	2600.00	0.36	189.77	100.00	2599.87	-16.34	16.34	S	14.96	W	22.16	222.48	0.32	-0.24	-25.53
27	2700.00	0.41	182.02	100.00	2699.87	-17.01	17.01	S	15.03	W	22.70	221.46	0.08	0.05	-7.75
28	2800.00	0.46	198.27	100.00	2799.87	-17.75	17.75	S	15.17	W	23.35	220.51	0.13	0.05	16.25
29	2900.00	0.51	183.94	100.00	2899.86	-18.58	18.58	S	15.32	W	24.08	219.52	0.13	0.05	-14.34
30	3000.00	0.53	221.83	100.00	2999.86	-19.37	19.37	S	15.66	W	24.91	218.97	0.34	0.02	37.89
31	3100.00	0.67	182.80	100.00	3099.85	-20.29	20.29	S	16.00	W	25.84	218.25	0.42	0.14	-39.03
32	3200.00	0.63	180.91	100.00	3199.85	-21.42	21.42	S	16.04	W	26.76	216.82	0.05	-0.04	-1.89
33	3300.00	0.84	182.13	100.00	3299.84	-22.70	22.70	S	16.07	W	27.82	215.30	0.22	0.22	1.22
34	3400.00	0.87	184.30	100.00	3399.83	-24.19	24.19	S	16.16	W	29.09	213.74	0.04	0.02	2.17
35	3500.00	1.09	168.04	100.00	3499.81	-25.87	25.87	S	16.02	W	30.43	211.76	0.36	0.23	-16.26



**Company:** EP Energy  
**Well:** DW Landfill 3-33B4  
**Location:** Duchesne, UT  
**Rig:** Patterson 307

**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	3600.00	0.79	165.62	100.00	3599.80	-27.48	27.48	S	15.65	W	31.62	209.66	0.30	-0.30	-2.42
37	3658.00	1.19	153.42	58.00	3657.79	-28.40	28.40	S	15.28	W	32.25	208.28	0.78	0.69	-21.03
38	3771.00	1.58	150.53	113.00	3770.76	-30.81	30.81	S	13.99	W	33.84	204.42	0.35	0.34	-2.56
39	3866.00	0.92	151.59	95.00	3865.73	-32.62	32.62	S	12.98	W	35.11	201.70	0.70	-0.69	1.12
40	3961.00	1.35	27.71	95.00	3960.72	-32.30	32.30	S	12.10	W	34.49	200.53	2.12	0.45	-130.40
41	4056.00	2.67	6.37	95.00	4055.66	-29.11	29.11	S	11.33	W	31.24	201.26	1.57	1.39	-22.46
42	4150.00	5.10	5.56	94.00	4149.44	-22.78	22.78	S	10.68	W	25.16	205.13	2.59	2.59	-0.86
43	4246.00	6.12	5.55	96.00	4244.98	-13.44	13.44	S	9.77	W	16.62	216.03	1.06	1.06	-0.01
44	4342.00	7.47	6.97	96.00	4340.30	-2.15	2.15	S	8.52	W	8.79	255.85	1.42	1.41	1.48
45	4437.00	6.88	6.65	95.00	4434.56	9.63	9.63	N	7.11	W	11.97	323.55	0.62	-0.62	-0.34
46	4533.00	6.76	2.99	96.00	4529.88	20.99	20.99	N	6.15	W	21.87	343.66	0.47	-0.13	-3.81
47	4629.00	7.15	1.07	96.00	4625.17	32.60	32.60	N	5.75	W	33.10	350.00	0.47	0.41	-2.00
48	4724.00	7.37	5.31	95.00	4719.41	44.58	44.58	N	5.07	W	44.87	353.51	0.61	0.23	4.46
49	4819.00	8.41	10.64	95.00	4813.51	57.48	57.48	N	3.23	W	57.57	356.79	1.34	1.09	5.61
50	4915.00	8.42	20.41	96.00	4908.49	70.96	70.96	N	0.52	E	70.97	0.42	1.49	0.01	10.18
51	5010.00	8.88	29.09	95.00	5002.41	83.89	83.89	N	6.51	E	84.14	4.44	1.46	0.48	9.14
52	5104.00	7.33	27.44	94.00	5095.47	95.55	95.55	N	12.80	E	96.41	7.63	1.67	-1.65	-1.76
53	5199.00	8.21	24.03	95.00	5189.59	107.13	107.13	N	18.36	E	108.69	9.72	1.05	0.93	-3.59
54	5294.00	8.02	13.48	95.00	5283.65	119.77	119.77	N	22.67	E	121.89	10.72	1.58	-0.20	-11.11
55	5390.00	7.48	20.40	96.00	5378.77	132.14	132.14	N	26.41	E	134.75	11.30	1.12	-0.56	7.21
56	5485.00	7.71	18.02	95.00	5472.94	143.99	143.99	N	30.53	E	147.19	11.97	0.41	0.24	-2.51
57	5580.00	7.71	24.44	95.00	5567.08	155.85	155.85	N	35.14	E	159.77	12.71	0.91	0.00	6.76
58	5675.00	8.06	20.95	95.00	5661.19	167.88	167.88	N	40.16	E	172.61	13.45	0.62	0.37	-3.67
59	5769.00	7.88	21.98	94.00	5754.28	180.00	180.00	N	44.93	E	185.53	14.01	0.24	-0.19	1.10
60	5864.00	7.00	23.37	95.00	5848.48	191.36	191.36	N	49.66	E	197.70	14.55	0.95	-0.93	1.46
61	5959.00	6.81	30.98	95.00	5942.79	201.50	201.50	N	54.86	E	208.83	15.23	0.98	-0.20	8.01
62	6055.00	7.68	30.15	96.00	6038.02	211.93	211.93	N	61.01	E	220.53	16.06	0.91	0.91	-0.86
63	6150.00	6.30	23.33	95.00	6132.32	222.20	222.20	N	66.26	E	231.87	16.60	1.69	-1.45	-7.18
64	6246.00	4.88	21.38	96.00	6227.86	230.84	230.84	N	69.83	E	241.17	16.83	1.49	-1.48	-2.03
65	6342.00	3.58	27.42	96.00	6323.59	237.31	237.31	N	72.70	E	248.19	17.03	1.43	-1.35	6.29
66	6437.00	1.81	23.47	95.00	6418.48	241.32	241.32	N	74.67	E	252.60	17.19	1.87	-1.86	-4.16
67	6531.00	0.63	3.43	94.00	6512.46	243.19	243.19	N	75.29	E	254.58	17.20	1.32	-1.26	-21.32
68	6627.00	0.07	187.01	96.00	6608.46	243.66	243.66	N	75.31	E	255.04	17.18	0.73	-0.58	191.23
69	6722.00	0.52	200.52	95.00	6703.46	243.20	243.20	N	75.16	E	254.55	17.17	0.48	0.47	14.22
70	6817.00	1.20	182.29	95.00	6798.45	241.80	241.80	N	74.96	E	253.16	17.22	0.76	0.72	-19.19
71	6913.00	1.57	188.88	96.00	6894.42	239.50	239.50	N	74.72	E	250.88	17.33	0.42	0.39	6.86
72	7008.00	1.63	202.84	95.00	6989.38	236.97	236.97	N	74.00	E	248.25	17.34	0.41	0.06	14.69



**Company:** EP Energy  
**Well:** DW Landfill 3-33B4  
**Location:** Duchesne, UT  
**Rig:** Patterson 307

**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	7104.00	2.17	205.11	96.00	7085.33	234.06	234.06	N	72.69	E	245.09	17.25	0.57	0.56	2.36
74	7199.00	2.38	201.71	95.00	7180.25	230.60	230.60	N	71.20	E	241.34	17.16	0.26	0.22	-3.58
75	7295.00	2.88	205.43	96.00	7276.15	226.57	226.57	N	69.43	E	236.97	17.04	0.55	0.52	3.88
76	7391.00	2.64	202.99	96.00	7372.04	222.36	222.36	N	67.53	E	232.39	16.89	0.28	-0.25	-2.54
77	7486.00	2.92	203.17	95.00	7466.93	218.12	218.12	N	65.72	E	227.81	16.77	0.29	0.29	0.19
78	7581.00	3.20	200.49	95.00	7561.79	213.41	213.41	N	63.84	E	222.76	16.65	0.33	0.29	-2.82
79	7676.00	3.44	200.17	95.00	7656.63	208.25	208.25	N	61.93	E	217.27	16.56	0.25	0.25	-0.34
80	7773.00	4.07	196.72	97.00	7753.43	202.22	202.22	N	59.94	E	210.92	16.51	0.69	0.65	-3.56
81	7868.00	4.25	195.35	95.00	7848.18	195.60	195.60	N	58.04	E	204.03	16.53	0.22	0.19	-1.44
82	7964.00	3.42	203.27	96.00	7943.96	189.54	189.54	N	55.96	E	197.63	16.45	1.02	-0.86	8.25
83	8060.00	3.48	199.25	96.00	8039.79	184.16	184.16	N	53.87	E	191.88	16.31	0.26	0.06	-4.19
84	8155.00	3.33	194.38	95.00	8134.62	178.76	178.76	N	52.24	E	186.24	16.29	0.34	-0.16	-5.13
85	8250.00	3.39	195.04	95.00	8229.46	173.38	173.38	N	50.82	E	180.67	16.34	0.08	0.06	0.69
86	8346.00	3.29	195.99	96.00	8325.29	167.99	167.99	N	49.33	E	175.08	16.36	0.12	-0.10	0.99
87	8442.00	3.29	192.33	96.00	8421.13	162.65	162.65	N	47.98	E	169.58	16.44	0.22	0.00	-3.81
88	8538.00	3.23	195.41	96.00	8516.98	157.35	157.35	N	46.67	E	164.13	16.52	0.19	-0.06	3.21
89	8633.00	3.03	196.07	95.00	8611.84	152.36	152.36	N	45.27	E	158.94	16.55	0.21	-0.21	0.69
90	8728.00	2.77	196.94	95.00	8706.72	147.75	147.75	N	43.90	E	154.14	16.55	0.28	-0.27	0.92
91	8824.00	2.81	200.31	96.00	8802.60	143.32	143.32	N	42.41	E	149.47	16.48	0.18	0.04	3.51
92	8919.00	3.01	198.47	95.00	8897.48	138.78	138.78	N	40.81	E	144.65	16.39	0.23	0.21	-1.94
93	9015.00	2.50	136.93	96.00	8993.39	134.85	134.85	N	41.44	E	141.08	17.08	2.97	-0.53	-64.10
94	9110.00	2.63	198.81	95.00	9088.31	131.28	131.28	N	42.16	E	137.88	17.80	2.78	0.14	65.14
95	9205.00	2.43	228.60	95.00	9183.22	127.88	127.88	N	39.94	E	133.97	17.35	1.38	-0.21	31.36
96	9300.00	3.31	273.17	95.00	9278.11	126.70	126.70	N	35.69	E	131.63	15.73	2.45	0.93	46.92
97	9395.00	3.65	294.04	95.00	9372.94	128.08	128.08	N	30.19	E	131.59	13.26	1.37	0.36	21.97
98	9490.00	1.50	308.56	95.00	9467.84	130.09	130.09	N	26.46	E	132.75	11.50	2.35	-2.26	15.28
99	9586.00	1.13	357.06	96.00	9563.82	131.82	131.82	N	25.43	E	134.25	10.92	1.18	-0.39	50.52
100	9682.00	1.05	321.30	96.00	9659.80	133.45	133.45	N	24.83	E	135.74	10.54	0.70	-0.08	-37.25
101	9872.00	0.99	164.14	190.00	9849.79	133.23	133.23	N	24.19	E	135.41	10.29	1.05	-0.03	-82.72
102	9957.00	1.69	159.33	85.00	9934.77	131.35	131.35	N	24.83	E	133.68	10.70	0.83	0.82	-5.66
103	10274.00	3.30	180.10	317.00	10251.46	117.85	117.85	N	26.47	E	120.79	12.66	0.57	0.51	6.55
104	10370.00	2.80	183.10	96.00	10347.32	112.75	112.75	N	26.33	E	115.78	13.15	0.55	-0.52	3.13
105	10465.00	3.50	181.10	95.00	10442.18	107.53	107.53	N	26.15	E	110.67	13.67	0.75	0.74	-2.11
106	10747.00	3.10	186.10	282.00	10723.71	91.35	91.35	N	25.18	E	94.75	15.41	0.17	-0.14	1.77
107	11036.00	3.70	181.10	289.00	11012.20	74.25	74.25	N	24.17	E	78.09	18.03	0.23	0.21	-1.73
108	11502.00	4.00	179.10	466.00	11477.15	42.97	42.97	N	24.13	E	49.28	29.32	0.07	0.06	-0.43
109	12061.00	3.40	194.10	559.00	12035.00	7.39	7.39	N	20.40	E	21.70	70.08	0.20	-0.11	2.68



**Company:** EP Energy  
**Well:** DW Landfill 3-33B4  
**Location:** Duchesne, UT  
**Rig:** Patterson 307  
**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					
110	12544.00	2.80	189.10	483.00	12517.29	-18.15	18.15	S	15.05	E	23.57	140.33	0.14	-0.12	-1.04
111	12885.00	2.90	172.10	341.00	12857.87	-34.91	34.91	S	14.92	E	37.97	156.87	0.25	0.03	-4.99
112	12895.00	2.90	172.10	10.00	12867.86	-35.41	35.41	S	14.98	E	38.45	157.07	0.00	0.00	0.00

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-1746
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> DW Landfill 3-33B4
<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.	<b>9. API NUMBER:</b> 43013529030000
<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana , Houston, TX, 77002	<b>PHONE NUMBER:</b> 713 997-5038 Ext
<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT	<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1700 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 33 Township: 02.0S Range: 04.0W Meridian: U
	<b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>11/24/2014</b>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="See Below"/>

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

This is a 509 sack cement volume to attempt to bullhead cement down the annulus between the 7" and 9 5/8" casing to the TOC at 7,070'. This design should place cement up into the surface casing shoe and provided isolation of the un-cemented intervals in the intermediate string. If the treatment acts like it is breaking down and drinking the cement we will start staging in to get as much coverage as possible. EP would like to go forward with this cementing method as opposed to a traditional cement squeeze to keep the wellbore intact. There are multiple recoms in this wellbore and if there are squeeze perforation in the casing we will be unable to optimally stimulate down the casing. There is also a chance of the perforations leaking which would require more remedial work in the future.

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

Date: \_\_\_\_\_  
 By: Dark Quif

<b>NAME (PLEASE PRINT)</b> Maria S. Gomez	<b>PHONE NUMBER</b> 713 997-5038	<b>TITLE</b> Principal Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/21/2014	



***Casing Bullhead Cementing Procedure***

**DW Landfill 3-33B4**

API # : 43013529030000

Section: Sec 33, T 2S R 4W

Lat: 40°15'31.560" N, Long: 110°20'40.465" W

Altamont Field

Duchesne County, UT

AFE : 159947

Version #1 : 12/2/2014

**Objective :**

Isolate uncemented zones in the intermediate casing by bull head cementing through the 9 5/8" surface casing.

**Prepared By:**

\_\_\_\_\_  
Peter Schmeltz - Completion Engineer

\_\_\_\_\_  
Date

**Approved By**

\_\_\_\_\_  
Ken Collins - Completions Manager

\_\_\_\_\_  
Date

**Distribution (Approved Copies):**

- Gary Lamb
- Mohammad Siddiqui
- Peter Schmeltz
- Troy Anderton
- Ken Collins
- Well File (Central Records)
- Altamont Office (Well Files)

**Bull head Cement Prognosis  
DW Landfill 3-33B4**

**COMPANY PERSONNEL**

Title	Name	Office	Mobile
Completions Manager	Ken Collins	(713) 997-2151	(832) 317-2958
Staff Completions Engineer	Peter Schmeltz	(713) 997-6271	(956) 229-1814
Staff Completions Engineer	Mohammad Siddiqui	(713) 997-3319	(630) 930-1189
Geologist	Ron Schnieder	(713) 997-6437	(713) 557-5967
Completion Foreman	Troy Anderton	(435) 454-4229	(435) 823-1450
Completion Engineer	Jarrod Kent	(713) 997-5419	(970) 314-4550

**Tubular Data**

String	Description	Burst psi 100%	Collapse psi 100%	Body Yield (Mlbs)	Jt Yield (Mlbs)	ID (in.)	Drift (in.)	TOC (ft)
Conductor Casing	13-3/8" 54.5# J-55 STC @ 630							Surface
Surface Casing	9-5/8" 40# N-80 LTC @ 3723	5750	3090	916	737	8.84	8.68	Surface
Intermediate Casing	7" 29# HCP-110 LTC @ 10019	11220	8510	929	797	6.18	6.06	7,070
Production Liner	5" 18# HCP-110 STL @ 9739 - 12887	13940	15360	580	341	4.27	4.15	9,739
Tubing (proposed)	2-7/8" 6.5 ppf N-80	10570	11160		145	2.44	2.35	
Tubing (proposed)	2-3/8" 4.6 ppg N-80	11200	11780		72	2.00	1.90	

**Current Wellbore Condition**

The well is dead with a kill string installed.

## Procedure

- 1) Open up well on full choke to kill well. If needed, RU hot oiler and pump 2% KCl down tbg to kill well.
- 2) MIRU workover rig. ND wellhead and NU and test BOP's to 5,000 psi for 10 minutes. Have test recorded and charted to be signed and dated by well site supervisor. Record BOP serial number.
- 3) MIRU cementing equipment to bullhead cement down the 9 5/8" surface casing valve. Establish injection down 9 5/8" casing. **(Do not exceed a surface pressure of 4,000 psi)**
- 4) Pump 509 sack bullhead as planned. Shut in 9 5/8" casing valve. RDMO cement equipment.
- 5) POOH with kill string.
- 6) MIRU wireline. PU 7" retrieveable packer with pump out plug. RIH and set packer @ 8,000'. POOH.
- 7) RU WL unit with full lubricator. Test to 1,000 psi. Run CBL/CCL/GR log under 1,000 psi surface pressure from 8,000' to surface. POOH with CBL. RD WL unit. E-mail CBL to Completion Engineers listed in the Contact Table and review cement bond log results with Completion Engineer and team before proceeding. RDMO wireline.
- 8) PU on/off tool. TIH with 2 7/8" tubing and on/off tool. Latch on to packer @ 4,000' and release. POOH. LD packer assembly.
- 9) Install production tubing and co-rod per attached design. RDMO rig. Clean Location.

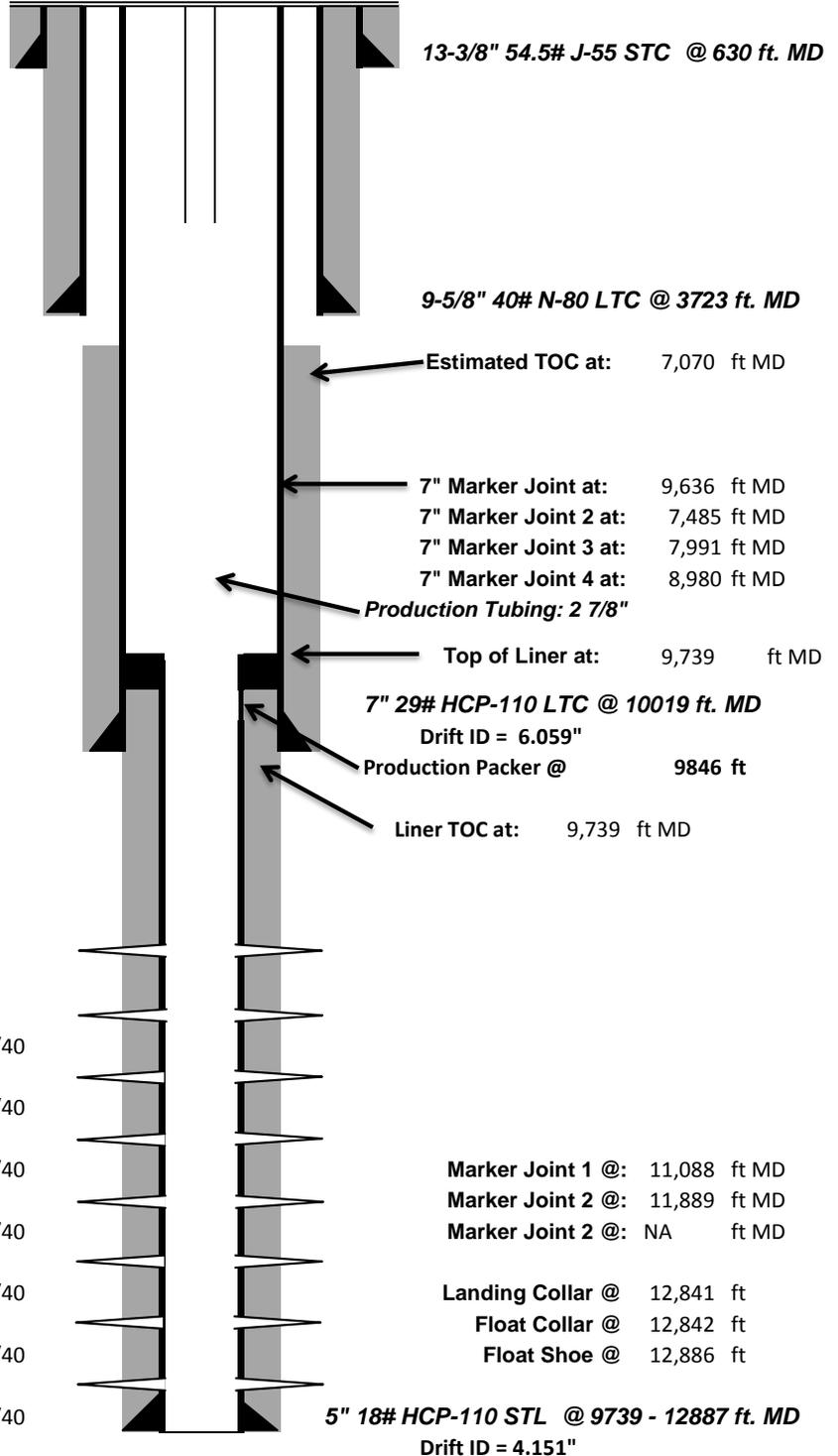


**Post-Completion Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **9/15/2014**  
 By: **Jarrod Kent**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **159947**

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



**Initial Completion Perf Information**

- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10547 - 10850 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #6** 10888 - 11121 22' /66 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #5** 11157 - 11429 23' /69 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #4** 11480 - 11731 21' /63 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #3** 11759 - 12039 21' /63 shots  
5000 gal HCL & 140000 lbs Power Prop 20/40
- Stage #2** 12087 - 12412 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12443 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40

- Marker Joint 1 @: 11,088 ft MD
- Marker Joint 2 @: 11,889 ft MD
- Marker Joint 2 @: NA ft MD
- Landing Collar @ 12,841 ft
- Float Collar @ 12,842 ft
- Float Shoe @ 12,886 ft



**Proposed Pumping Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **11/4/2014**  
 By: **Tomova**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **159947**

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

**~291 Jts 2-7/8" 6.5# N-80 8rd Tubing**

**Rod Detail @ 4.3 SPM**  
 1-1/2" x 40' Polished Rod  
 1,300' - 18/16" CoRod-semi SE  
 1,400' - 17/16" CoRod-semi SE  
 1,638' - 16/16" CoRod-semi SE  
 4,000' - 15/16" CoRod-semi SE  
 1,262' - 17/16" CoRod-semi SE  
 2-1/2" x 1-3/4" x 38' 2stg HVR Insert Pump

**13-3/8" 54.5# J-55 STC @ 630 ft. MD**

**9-5/8" 40# N-80 LTC @ 3723 ft. MD**

Estimated TOC a 7,070 ft MD

**Tubing Anchor @ 9,475'**  
 4 jts 2-7/8" 6.5# L-80 8rd Tubing  
 Seating Nipple @ 9,600'  
 2' x 2 7/8" Tubing Sub  
 5 1/2" x 32' PBGA  
 2 jt 2-7/8" Mud Anchor  
 5 3/4" No-Go Nipple  
 Slolid Plug / EOT @ 9,700'

Top of Liner at: 9,739 ft MD

**7" 29# HCP-110 LTC @ 10019 ft. MD**  
 Drift ID = 6.059"

Liner TOC at: 9,739 ft MD

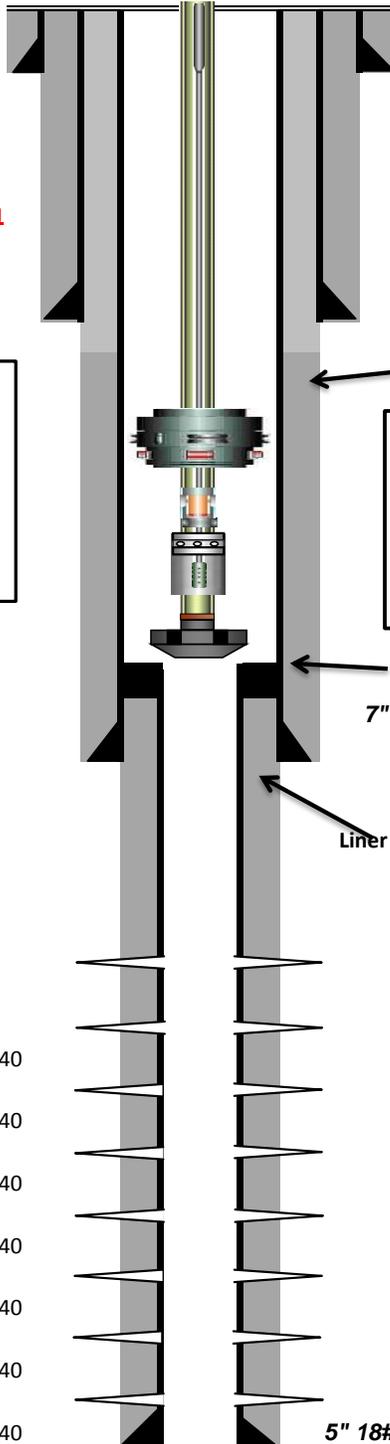
**Initial Completion Perf Information**

- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10547 - 10850 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #6** 10888 - 11121 22' /66 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #5** 11157 - 11429 23' /69 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #4** 11480 - 11731 21' /63 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #3** 11759 - 12039 21' /63 shots  
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- Stage #2** 12087 - 12412 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12443 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40

Marker Joint 1 @: 11,088 ft MD  
 Marker Joint 2 @: 11,889 ft MD  
 Marker Joint 2 @: NA ft MD

Landing Collar @ 12,841 ft  
 Float Collar @ 12,842 ft  
 Float Shoe @ 12,886 ft

**5" 18# HCP-110 STL @ 9739 - 12887 ft. MD**  
 Drift ID = 4.151"



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-1746
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7.UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> DW Landfill 3-33B4
<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.	<b>9. API NUMBER:</b> 43013529030000
<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana , Houston, TX, 77002	<b>PHONE NUMBER:</b> 713 997-5038 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1700 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 33 Township: 02.0S Range: 04.0W Meridian: U	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT  <b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 12/10/2014	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input style="width:100px;" type="text" value="Squeeze"/>

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

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

**Date:** December 10, 2014

**By:** 

**Please Review Attached Conditions of Approval**

<b>NAME (PLEASE PRINT)</b> Maria S. Gomez	<b>PHONE NUMBER</b> 713 997-5038	<b>TITLE</b> Principal Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 12/10/2014	



***Squeeze Cementing Procedure***

**DW Landfill 3-33B4**

API # : 43013529030000

Section: Sec 33, T 2S R 4W

Lat: 40°15'31.560" N, Long: 110°20'40.465" W

Altamont Field

Duchesne County, UT

AFE : 159947

Version #1 : 12/9/2014

**Objective :**

Pump a block cement squeeze to isolate SWD injection interval from offset injection well.

**Prepared By:**

\_\_\_\_\_  
Peter Schmeltz - Completion Engineer

\_\_\_\_\_  
Date

**Approved By**

\_\_\_\_\_  
Ken Collins - Completions Manager

\_\_\_\_\_  
Date

**Distribution (Approved Copies):**

Gary Lamb

Mohammad Siddiqui

Peter Schmeltz

Troy Anderton

Ken Collins

Well File (Central Records)

Altamont Office (Well Files)

**Bull head Cement Prognosis  
DW Landfill 3-33B4**

**COMPANY PERSONNEL**

Title	Name	Office	Mobile
Completions Manager	Ken Collins	(713) 997-2151	(832) 317-2958
Staff Completions Engineer	Peter Schmeltz	(713) 997-6271	(956) 229-1814
Staff Completions Engineer	Mohammad Siddiqui	(713) 997-3319	(630) 930-1189
Geologist	Ron Schnieder	(713) 997-6437	(713) 557-5967
Completion Foreman	Troy Anderton	(435) 454-4229	(435) 823-1450
Completion Engineer	Jarrod Kent	(713) 997-5419	(970) 314-4550

**Tubular Data**

String	Description	Burst psi 100%	Collapse psi 100%	Body Yield (Mlbs)	Jt Yield (Mlbs)	ID (in.)	Drift (in.)	TOC (ft)
Conductor Casing	13-3/8" 54.5# J-55 STC @ 630							Surface
Surface Casing	9-5/8" 40# N-80 LTC @ 3723	5750	3090	916	737	8.84	8.68	Surface
Intermediate Casing	7" 29# HCP-110 LTC @ 10019	11220	8510	929	797	6.18	6.06	7,070
Production Liner	5" 18# HCP-110 STL @ 9739 - 12887	13940	15360	580	341	4.27	4.15	9,739
Tubing (proposed)	2-7/8" 6.5 ppf N-80	10570	11160		145	2.44	2.35	
Tubing (proposed)	2-3/8" 4.6 ppg N-80	11200	11780		72	2.00	1.90	

**Current Wellbore Condition**

The well is dead with a kill string installed. A RBP is set at 7975'.

## Procedure

- 1) Open up well on full choke to kill well. If needed, RU hot oiler and pump 2% KCl down tbg to kill well.
- 2) Dump sand on top of RBP @ 7975'.
- 3) MIRU wireline. RIH and perforate 6100-6106' with a 3 3/4" gun, 22.7 gram charges, 4 SPF. POOH.
- 4) RIH with 7" cast iron cement retainer. Set at ~6080'. POOH.
- 5) RIH with 2 7/8" tubing. Sting into retainer. Breakdown perforations and establish injection rate.
- 6) MIRU cement equipment. Pump ~350 sack cement squeeze. RDMO cement equipment.
- 7) Sting out of cement retainer and POOH with 2 7/8" tubing. PU 6" rock bit, 2 7/8" drill collars. RIH and drillout cement retainer @~6080'. Clean out well to RBP @ 7975'. POOH. LD bit and drill collars.
- 8) RU wireline. RIH with CBL. Log from 7975' to TOC. Report to Houston. POOH.
- 9) Install production tubing and co-rod per attached design. RDMO rig. Clean Location.

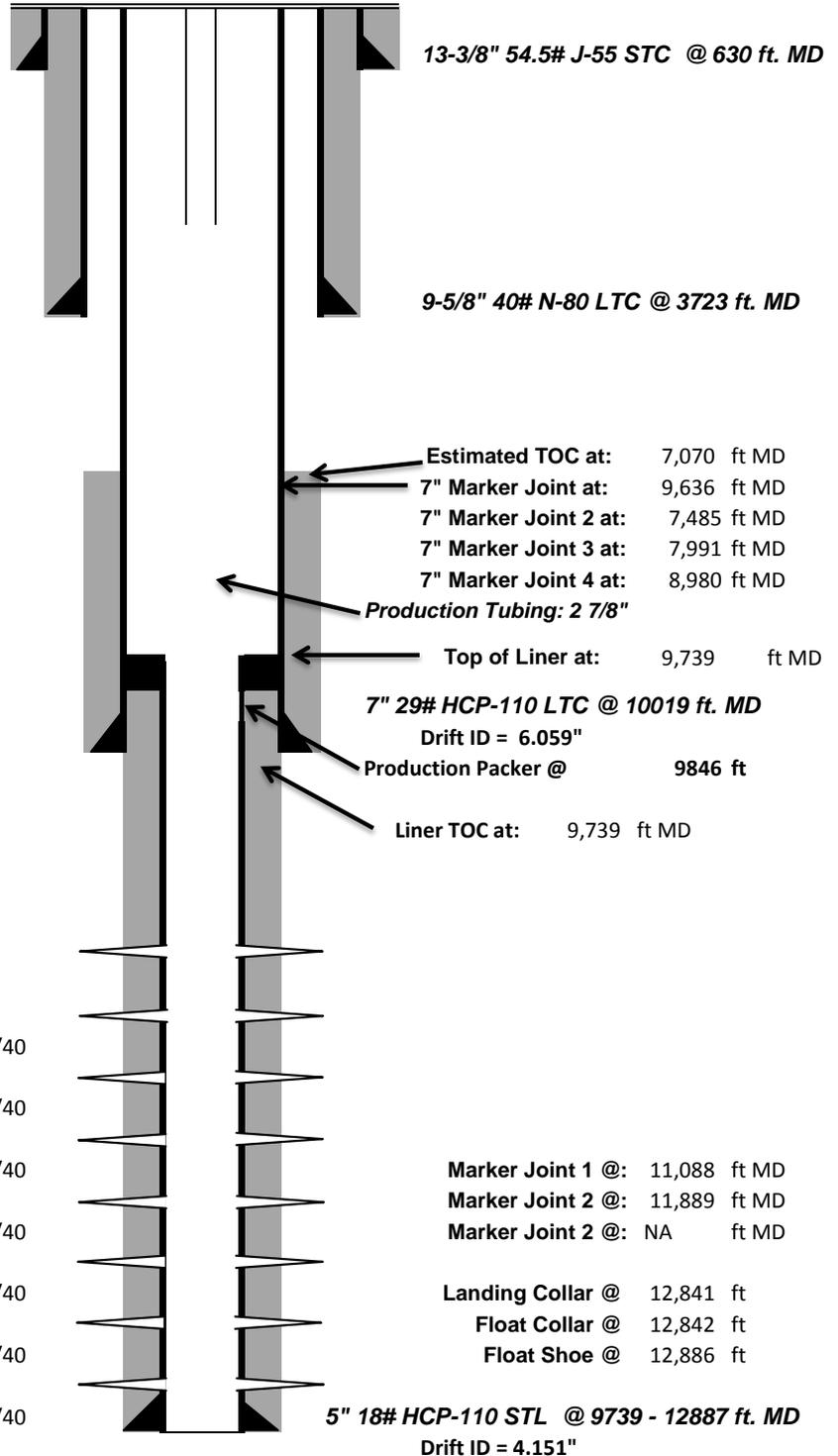


**Post-Completion Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **9/15/2014**  
 By: **Jarrod Kent**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **159947**

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



**Initial Completion Perf Information**

- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10547 - 10850 23' /69 shots  
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- Stage #2** 12087 - 12412 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12443 - 12796 23' /69 shots  
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- Marker Joint 1 @: 11,088 ft MD
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- Marker Joint 2 @: NA ft MD
- Landing Collar @ 12,841 ft
- Float Collar @ 12,842 ft
- Float Shoe @ 12,886 ft



**Proposed Pumping Wellbore Schematic**

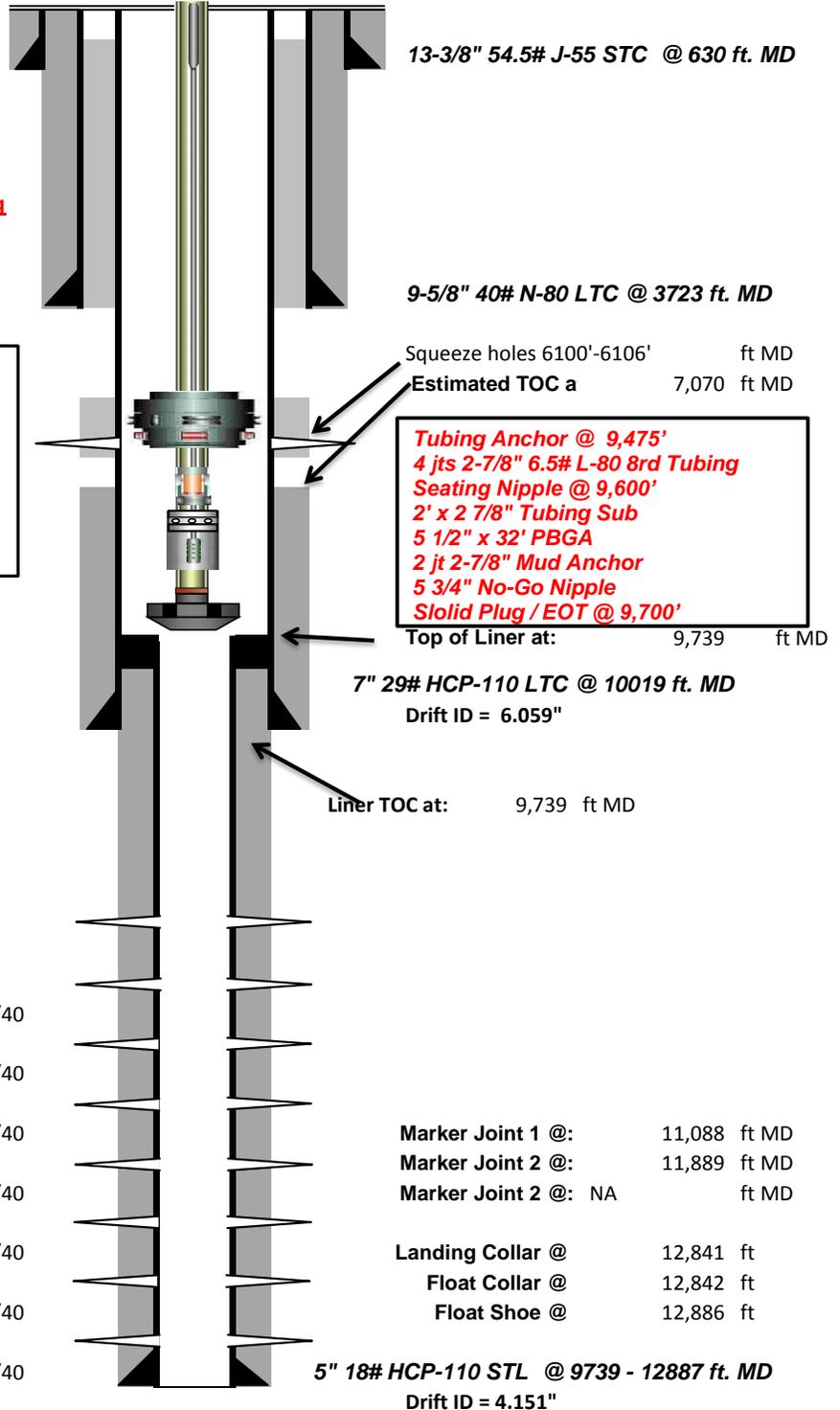
Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **12/9/2014**  
 By: **Peter Schmeltz**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **159947**

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

**~291 Jts 2-7/8" 6.5# N-80 8rd Tubing**

**Rod Detail @ 4.3 SPM**  
 1-1/2" x 40' Polished Rod  
 1,300' - 18/16" CoRod-semi SE  
 1,400' - 17/16" CoRod-semi SE  
 1,638' - 16/16" CoRod-semi SE  
 4,000' - 15/16" CoRod-semi SE  
 1,262' - 17/16" CoRod-semi SE  
 2-1/2" x 1-3/4" x 38' 2stg HVR Insert Pump



**Initial Completion Perf Information**

- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10547 - 10850 23' /69 shots  
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5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12443 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-1746
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<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7. UNIT or CA AGREEMENT NAME:</b>
--	---

<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> DW Landfill 3-33B4
------------------------------------	---

<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.	<b>9. API NUMBER:</b> 43013529030000
--	---

<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana , Houston, TX, 77002	<b>PHONE NUMBER:</b> 713 997-5038 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
---	--	--

<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1700 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 33 Township: 02.0S Range: 04.0W Meridian: U	<b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH
---	---

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>12/29/2014</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text" value="Squeeze"/>

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

Additional squeeze after reviewing last squeeze. See attached for details.

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

**Date:** \_\_\_\_\_  
**By:** Derek Quist

<b>NAME (PLEASE PRINT)</b> Maria S. Gomez	<b>PHONE NUMBER</b> 713 997-5038	<b>TITLE</b> Principal Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 12/28/2014	



**Squeeze Cementing Procedure**

**DW Landfill 3-33B4**

API # : 43013529030000

Section: Sec 33, T 2S R 4W

Lat: 40°15'31.560" N, Long: 110°20'40.465" W

Altamont Field

Duchesne County, UT

AFE : 159947

Version #1 : 12/24/2014

**Objective :**

Pump a block cement squeeze to isolate SWD injection interval from offset injection well.

**Prepared By:**

\_\_\_\_\_  
Peter Schmeltz - Completion Engineer

\_\_\_\_\_  
Date

**Approved By**

\_\_\_\_\_  
Ken Collins - Completions Manager

\_\_\_\_\_  
Date

**Distribution (Approved Copies):**

Gary Lamb

Peter Schmeltz

Troy Anderton

Ken Collins

Well File (Central Records)

Altamont Office (Well Files)

**Cement Squeeze Prognosis  
DW Landfill 3-33B4**

**COMPANY PERSONNEL**

Title	Name	Office	Mobile
Completions Manager	Ken Collins	(713) 997-2151	(832) 317-2958
Staff Completions Engineer	Peter Schmeltz	(713) 997-6271	(956) 229-1814
Staff Completions Engineer	Mohammad Siddiqui	(713) 997-3319	(630) 930-1189
Geologist	Ron Schnieder	(713) 997-6437	(713) 557-5967
Completion Foreman	Troy Anderton	(435) 454-4229	(435) 823-1450
Completion Engineer	Jarrod Kent	(713) 997-5419	(970) 314-4550

**Tubular Data**

String	Description	Burst psi 100%	Collapse psi 100%	Body Yield (Mlbs)	Jt Yield (Mlbs)	ID (in.)	Drift (in.)	TOC (ft)
Conductor Casing	13-3/8" 54.5# J-55 STC @ 630							Surface
Surface Casing	9-5/8" 40# N-80 LTC @ 3723	5750	3090	916	737	8.84	8.68	Surface
Intermediate Casing	7" 29# HCP-110 LTC @ 10019	11220	8510	929	797	6.18	6.06	7,070
Production Liner	5" 18# HCP-110 STL @ 9739 - 12887	13940	15360	580	341	4.27	4.15	9,739
Tubing (proposed)	2-7/8" 6.5 ppf N-80	10570	11160		145	2.44	2.35	
Tubing (proposed)	2-3/8" 4.6 ppg N-80	11200	11780		72	2.00	1.90	

**Current Wellbore Condition**

The well is dead. A RBP is set at 7975'.

## Procedure

- 1) Open up well on full choke to kill well. If needed, RU hot oiler and pump 2% KCl down tbg to kill well.
- 2) MIRU wireline. RIH and perforate 4100-4102' with a 3 3/4" gun, 22.7 gram charges, 4 SPF. POOH. Breakdown perforations and establish injection rate.
- 3) RIH with 7" cast iron cement retainer. Set at ~4080'. POOH.
- 4) RIH with 2 7/8" tubing. Sting into retainer.
- 5) MIRU cement equipment. Pump ~350 sack cement squeeze. RDMO cement equipment.
- 6) Sting out of cement retainer and POOH with 2 7/8" tubing. PU 6" rock bit, 2 7/8" drill collars. RIH and drillout cement retainer @~4080'. Clean out well to RBP @ 7975'. POOH. LD bit and drill collars.
- 7) Sting out of cement retainer and POOH with 2 7/8" tubing. PU 6" rock bit, 2 7/8" drill collars. RIH and drillout cement retainer @~6080'. Clean out well to RBP @ 7975'. POOH. LD bit and drill collars.
- 8) Wait 48 hours. RU wireline. Run CBL from RBP @ 7975' to surface. Send CBL to Engineer. SD and wait for state approval of squeeze.
- 9) Install production tubing and co-rod per attached design. RDMO rig. Clean Location.



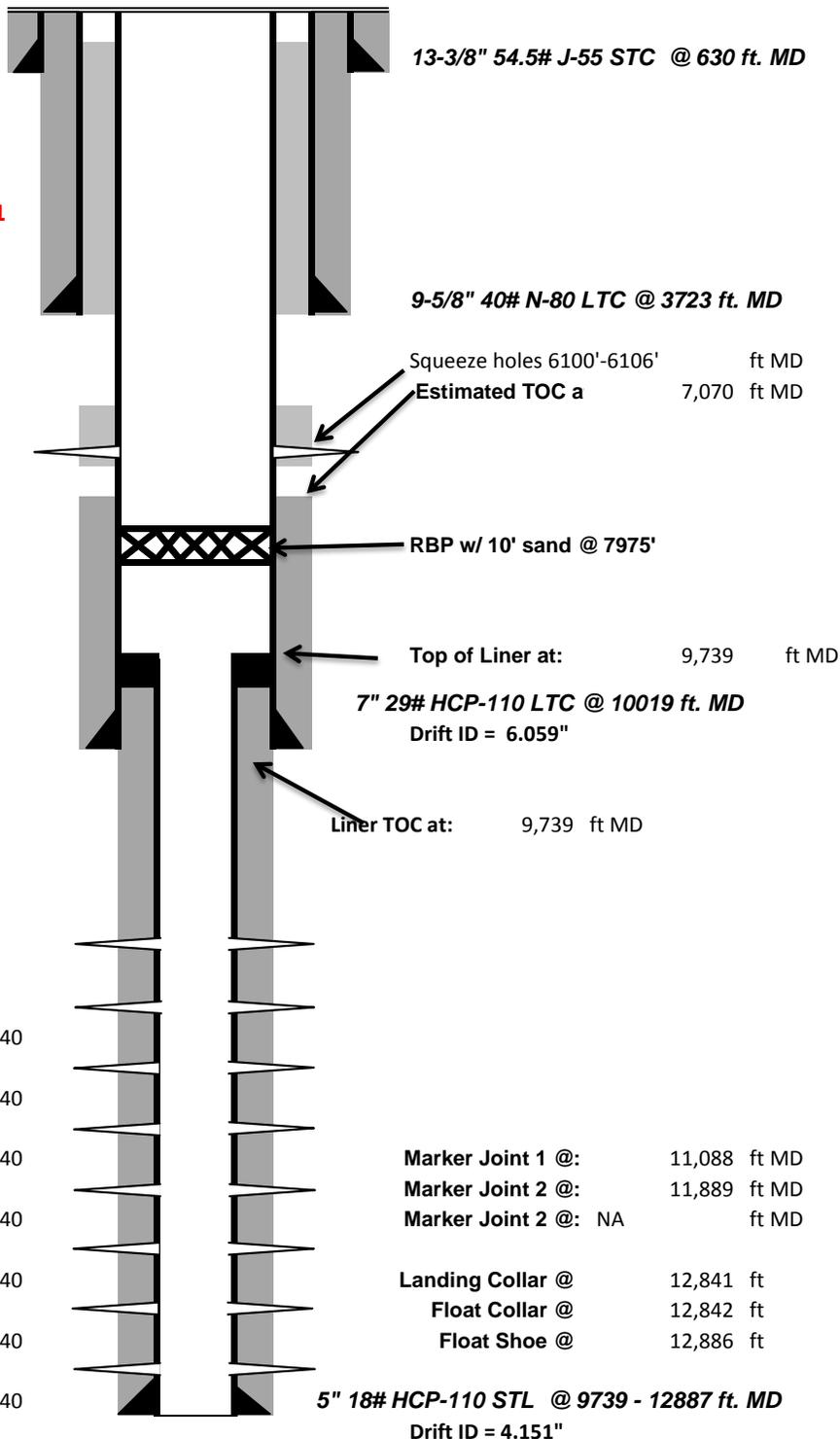
**Proposed Pumping Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **12/9/2014**  
 By: **Peter Schmeltz**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **159947**

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

**~291 Jts 2-7/8" 6.5# N-80 8rd Tubing**



**Initial Completion Perf Information**

- Stage #8 10255 - 10521 23' /69 shots**  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7 10547 - 10850 23' /69 shots**  
5000 gal HCL & 150000 lbs Power Prop 20/40
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- Stage #4 11480 - 11731 21' /63 shots**  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #3 11759 - 12039 21' /63 shots**  
5000 gal HCL & 140000 lbs Power Prop 20/40
- Stage #2 12087 - 12412 23' /69 shots**  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1 12443 - 12796 23' /69 shots**  
5000 gal HCL & 150000 lbs Power Prop 20/40



**Proposed Pumping Wellbore Schematic**

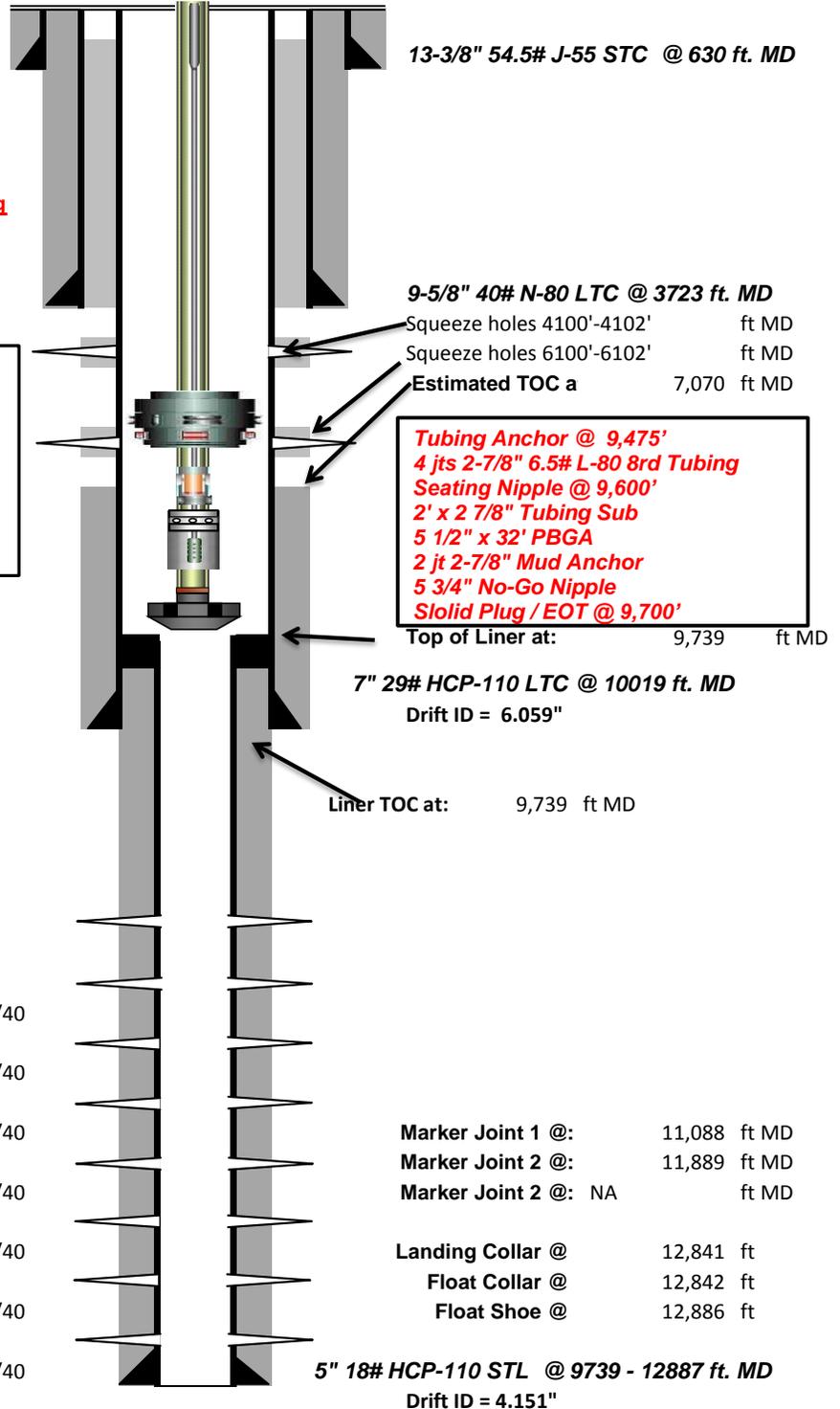
Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **12/24/2014**  
 By: **Peter Schmeltz**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **159947**

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

**~291 Jts 2-7/8" 6.5# N-80 8rd Tubing**

**Rod Detail @ 4.3 SPM**  
 1-1/2" x 40' Polished Rod  
 1,300' - 18/16" CoRod-semi SE  
 1,400' - 17/16" CoRod-semi SE  
 1,638' - 16/16" CoRod-semi SE  
 4,000' - 15/16" CoRod-semi SE  
 1,262' - 17/16" CoRod-semi SE  
 2-1/2" x 1-3/4" x 38' 2stg HVR Insert Pump



**Initial Completion Perf Information**

- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10547 - 10850 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #6** 10888 - 11121 22' /66 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #5** 11157 - 11429 23' /69 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #4** 11480 - 11731 21' /63 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #3** 11759 - 12039 21' /63 shots  
5000 gal HCL & 140000 lbs Power Prop 20/40
- Stage #2** 12087 - 12412 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12443 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-1746
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> DW Landfill 3-33B4
<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.	<b>9. API NUMBER:</b> 43013529030000
<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana , Houston, TX, 77002	<b>PHONE NUMBER:</b> 713 997-5038 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1700 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 33 Township: 02.0S Range: 04.0W Meridian: U	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT  <b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>1/15/2015</b>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Squeeze"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 EP plans to pump a block cement squeeze to isolate SWD interval from offset injection well.

**Approved by the**  
**January 14, 2015**  
**Oil, Gas and Mining**

Date: \_\_\_\_\_  
 By: Dark Quif

<b>NAME (PLEASE PRINT)</b> Maria S. Gomez	<b>PHONE NUMBER</b> 713 997-5038	<b>TITLE</b> Principal Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/14/2015	



***Squeeze Cementing Procedure***

**DW Landfill 3-33B4**

API # : 43013529030000

Section: Sec 33, T 2S R 4W

Lat: 40°15'31.560" N, Long: 110°20'40.465" W

Altamont Field

Duchesne County, UT

AFE :

Version #1 : 1/14/2015

**Objective :**

Pump a block cement squeeze to isolate SWD injection interval from offset injection well.

**Prepared By:**

\_\_\_\_\_  
Peter Schmeltz - Completion Engineer

\_\_\_\_\_  
Date

**Reviewed By:**

\_\_\_\_\_  
Troy Anderton - Completion Supervisor

\_\_\_\_\_  
Date

**Approved By**

\_\_\_\_\_  
Ken Collins - Completions Manager

\_\_\_\_\_  
Date

**Distribution (Approved Copies):**

- Gary Lamb
- Peter Schmeltz
- Troy Anderton
- Ken Collins
- Well File (Central Records)
- Altamont Office (Well Files)

**Cement Squeeze Prognosis  
DW Landfill 3-33B4**

**COMPANY PERSONNEL**

Title	Name	Office	Mobile
Completions Manager	Ken Collins	(713) 997-2151	(832) 317-2958
Staff Completions Engineer	Peter Schmeltz	(713) 997-6271	(956) 229-1814
Staff Completions Engineer	Mohammad Siddiqui	(713) 997-3319	(630) 930-1189
Geologist	Ron Schnieder	(713) 997-6437	(713) 557-5967
Completion Foreman	Troy Anderton	(435) 454-4229	(435) 823-1450
Completion Engineer			

**Tubular Data**

String	Description	Burst psi 100%	Collapse psi 100%	Body Yield (Mlbs)	Jt Yield (Mlbs)	ID (in.)	Drift (in.)	TOC (ft)
Conductor Casing	13-3/8" 54.5# J-55 STC @ 630							Surface
Surface Casing	9-5/8" 40# N-80 LTC @ 3723	5750	3090	916	737	8.84	8.68	Surface
Intermediate Casing	7" 29# HCP-110 LTC @ 10019	11220	8510	929	797	6.18	6.06	7,070
Production Liner	5" 18# HCP-110 STL @ 9739 - 12887	13940	15360	580	341	4.27	4.15	9,739
Tubing (proposed)	2-7/8" 6.5 ppf N-80	10570	11160		145	2.44	2.35	
Tubing (proposed)	2-3/8" 4.6 ppg N-80	11200	11780		72	2.00	1.90	

**Current Wellbore Condition**

The well is dead. A RBP's set at 5,010' and 7,975'.

## Procedure

- 1) Open up well on full choke to kill well. If needed, RU hot oiler and pump 2% KCl down tbg to kill well.
- 2) MIRU wireline. RIH and set 7" RBP @4,090'. Dump bail 10' of sand on top. POOH. (RBP's @ 5,010' and 7,975' barriers)
- 3) RIH and perforate 3,950-3,952' with a 3 3/4" gun, 22.7 gram charges, 4 SPF. POOH. Breakdown perforations and establish injection rate.
- 4) RIH with 7" cast iron cement retainer. Set at ~3,870'. POOH. RDMO wireline.
- 5) RIH with 2 7/8" tubing. Sting into retainer.
- 6) MIRU cement equipment. Pump ~200 sack cement squeeze as per Halliburton design. RDMO cement equipment.
- 7) Sting out of cement retainer and POOH with 2 7/8" tubing. PU 6" rock bit, 2 7/8" drill collars. RIH and drillout cement retainer @~3,870'. Clean out well to RBP @ 4,090'. POOH. LD bit and drill collars.
- 8) Wait 48 hours. RU wireline. Run CBL from RBP @ 4,090' to surface. Send CBL to Engineer. SD and wait for state approval of squeeze.



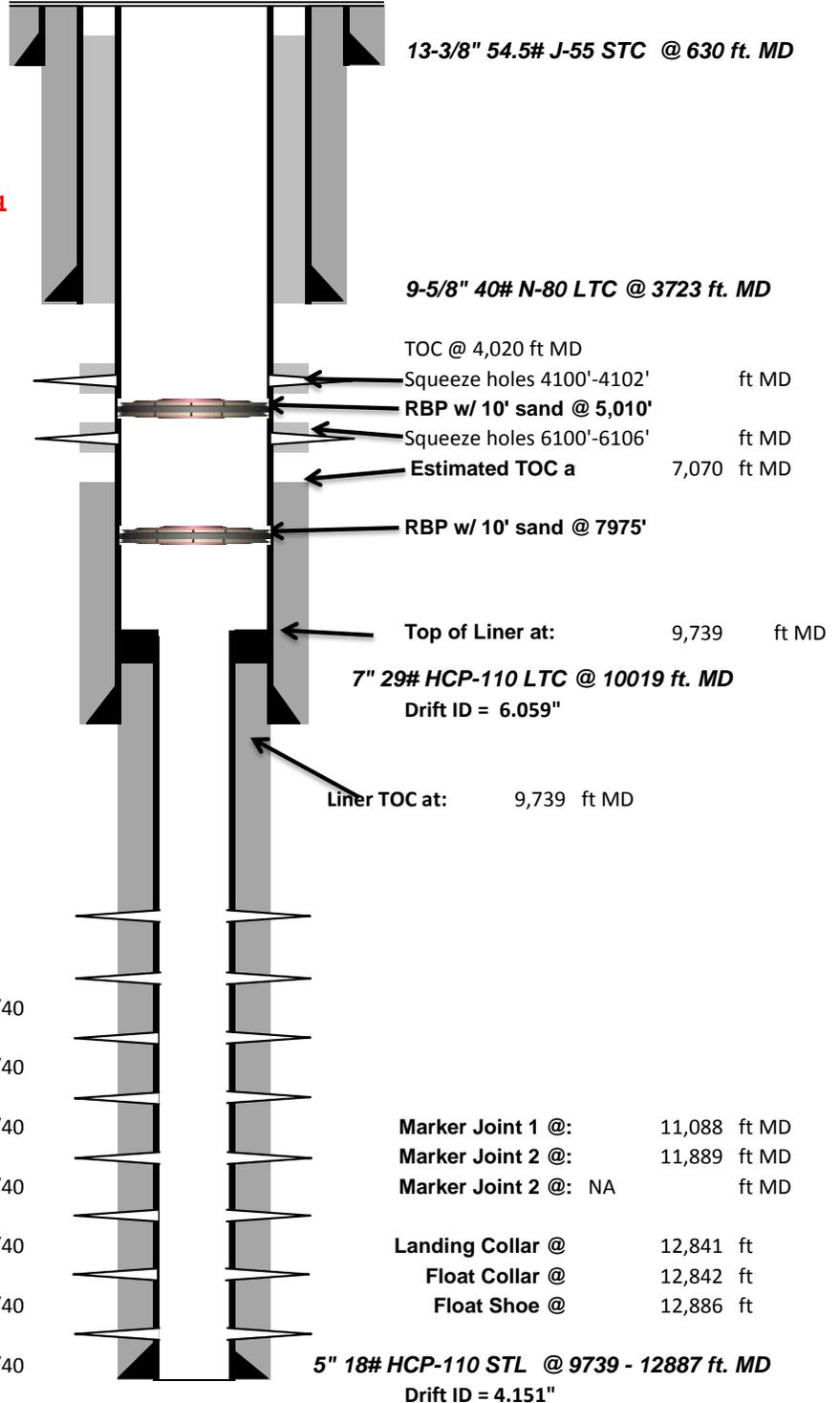
**Proposed Pumping Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **1/14/2015**  
 By: **Peter Schmeltz**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **0**

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

**~291 Jts 2-7/8" 6.5# N-80 8rd Tubing**



**Initial Completion Perf Information**

- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10547 - 10850 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #6** 10888 - 11121 22' /66 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #5** 11157 - 11429 23' /69 shots  
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- Stage #3** 11759 - 12039 21' /63 shots  
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- Stage #2** 12087 - 12412 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12443 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40

- Marker Joint 1 @:** 11,088 ft MD
- Marker Joint 2 @:** 11,889 ft MD
- Marker Joint 2 @:** NA ft MD
- Landing Collar @** 12,841 ft
- Float Collar @** 12,842 ft
- Float Shoe @** 12,886 ft



**Proposed Pumping Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

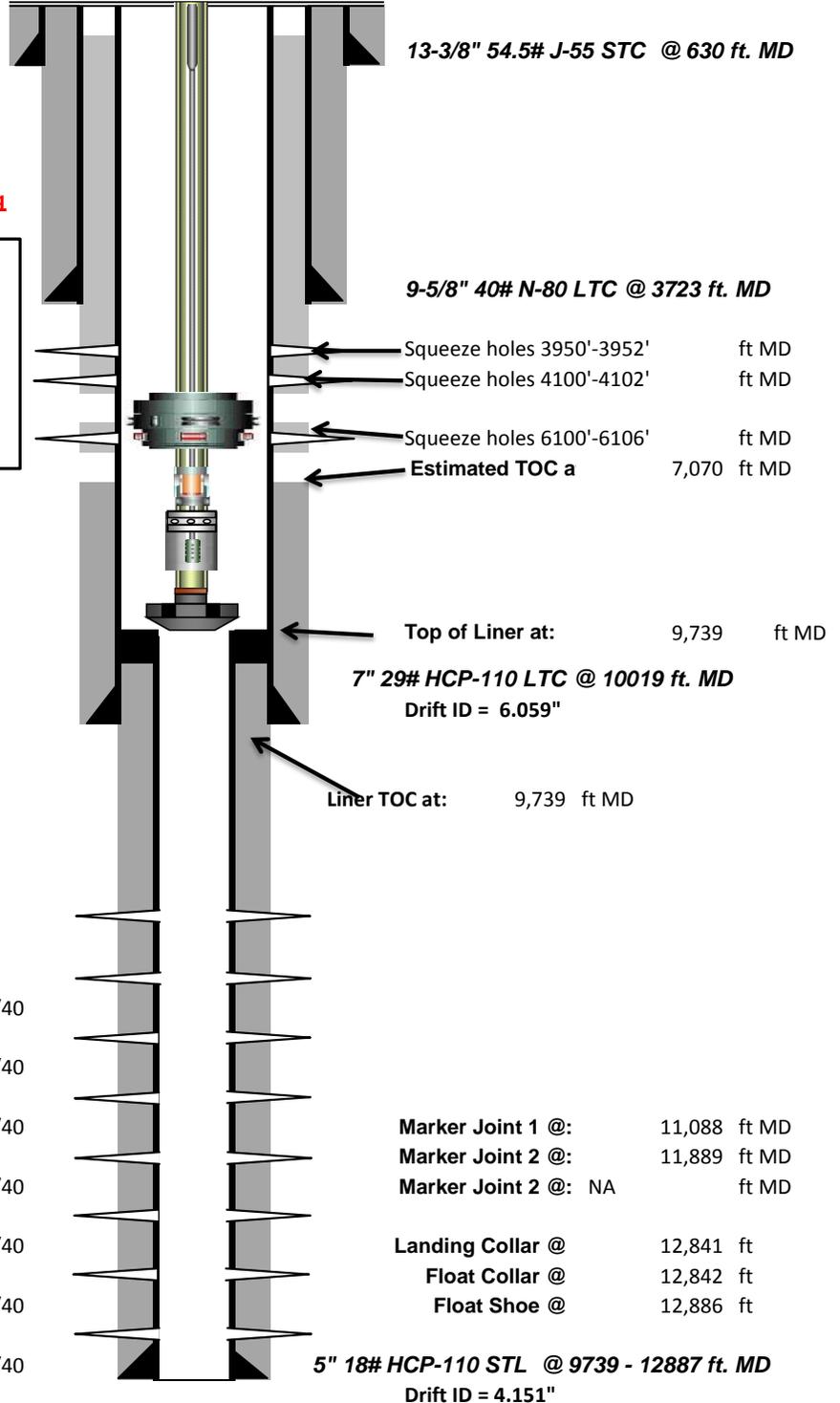
Last Updated: **1/14/2015**  
 By: **Peter Schmeltz**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **0**

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

**~291 Jts 2-7/8" 6.5# N-80 8rd Tubing**

**Rod Detail @ 4.3 SPM**  
 1-1/2" x 40' Polished Rod  
 1,300' - 18/16" CoRod-semi SE  
 1,400' - 17/16" CoRod-semi SE  
 1,638' - 16/16" CoRod-semi SE  
 4,000' - 15/16" CoRod-semi SE  
 1,262' - 17/16" CoRod-semi SE  
 2-1/2" x 1-3/4" x 38' 2stg HVR Insert Pump

**Tubing Anchor @ 9,475'**  
 4 jts 2-7/8" 6.5# L-80 8rd Tubing  
 Seating Nipple @ 9,600'  
 2' x 2 7/8" Tubing Sub  
 5 1/2" x 32' PBGA  
 2 jt 2-7/8" Mud Anchor  
 5 3/4" No-Go Nipple  
 Slolid Plug / EOT @ 9,700'



**Initial Completion Perf Information**

- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10547 - 10850 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
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5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12443 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-1746
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<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7. UNIT or CA AGREEMENT NAME:</b>
--	---

<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> DW Landfill 3-33B4
------------------------------------	---

<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.	<b>9. API NUMBER:</b> 43013529030000
--	---

<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana , Houston, TX, 77002	<b>PHONE NUMBER:</b> 713 997-5038 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
---	--	--

<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1700 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 33 Township: 02.0S Range: 04.0W Meridian: U	<b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH
---	---

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 4/3/2016  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

Please see attached REVISED procedure along with before and after wellbore diagrams.

**Approved by the**  
**March 29, 2016**  
**Oil, Gas and Mining**

Date: \_\_\_\_\_

By:       Derek Quist      

<b>NAME (PLEASE PRINT)</b> Linda Renken	<b>PHONE NUMBER</b> 713 997-5138	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/24/2016	

## DW Landfill 3-33 B4 Recom Summary Procedure

- POOH with rods, pump & tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing and joints of rods.
- Set casing patches across December 2014 to January 2015 squeeze holes at 6,000'-6,002', 4,100'-4,102' and 3,950'-3,952'.
- Pressure test csg.
- Set 15k CBP for 5" 18# casing @ 10,000' w/ 15' cement dump bailed on plug.
- Stage 1:
  - Perforate new UW/LGR interval from **9,770' – 9,896'**.
  - Acid Frac Perforations with **15,000** gals 15% HCl acid (Stage 1 Recom).
- Stage 2:
  - RIH with 7" CBP & set @ **9,579'**.
  - Perforate new LGR interval from **9,476' – 9,564'**.
  - Acid Frac Perforations with **10,000** gals 15% HCl acid (Stage 2 Recom).
- Stage 3:
  - RIH w/ 7" CBP & set @ **9,399'**.
  - Perforate new LGR interval from **9,336' – 9,384'**.
  - Acid Frac Perforations with **6,000** gals 15% HCL acid (Stage 3 Recom)
- Stage 4:
  - RIH w/ 7" CBP & set @ **9,265'**.
  - Perforate new LGR interval from **9,036' – 9,250'**.
  - Prop Frac perforations with with **120,000** lbs 30/50 prop (w/ **6,000** lbs 100 mesh & **9,000** gals 15% HCl acid) (Stage 4 Recom).
- Clean out well drilling up (3) 7" CBPs, leaving 5" 15k CBP @ 10,000' w/ 15' CMT. (New PBTD @ 9,985'). Top perf BELOW plugs @ 10,255'.
- RIH w/ production tubing and rods.
- Clean location and resume production.

**Current WBS**



**Current Pumping Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

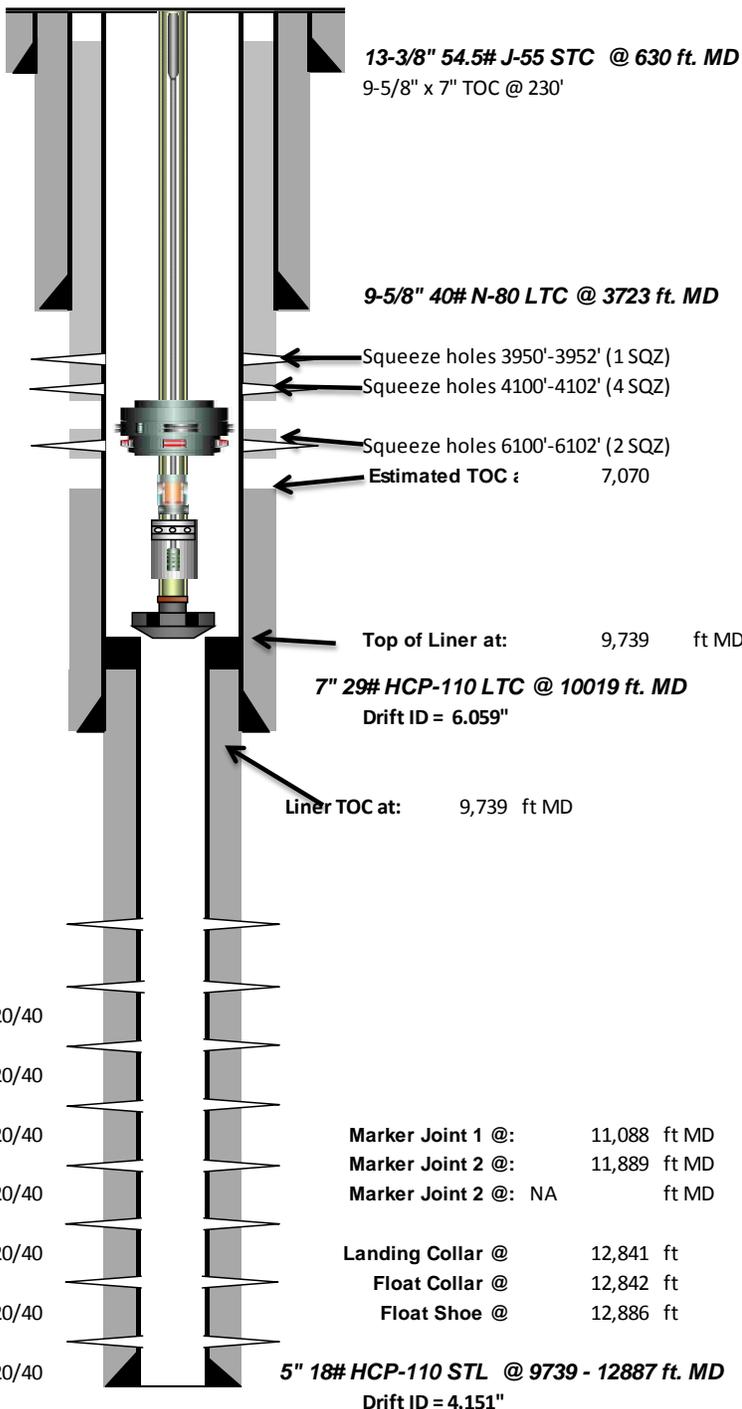
Last Updated: **9/15/2015**  
 By: **Krug**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **0**

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

**-252 Jts 2-7/8" 6.5# N-80 8rd Tubing**

**Rod Detail @ 4.3 SPM**  
 1-1/2" x 40' Polished Rod  
 1,180' - 18/16" CoRod-semi SE  
 1,400' - 17/16" CoRod-semi SE  
 1,638' - 16/16" CoRod-semi SE  
 3,992' - 15/16" CoRod-semi SE  
 40' 16/16" CoRod-semi SE  
 1,230' - 17/16" CoRod-semi SE  
 3' Stabilizer Sub

**Tubing Anchor @ 9,460'**  
 4 jts 2-7/8" 6.5# L-80 8rd Tubing  
 4' x 2-7/8" pup joint  
**Seating Nipple @ 9,598'**  
 2' x 2 7/8" Tubing Sub  
 5 1/2" x 32' PBGA  
 2 jt 2-7/8" Mud Anchor  
 5 3/4" No-Go Nipple  
**Slolid Plug / EOT @ 9,700'**



**Initial Completion Perf Information**

Stage #	Interval	Shots	Fluids
Stage #8	10255 - 10521	23' /69 shots	5000 gal HCL & 140000 lbs TLC 20/40
Stage #7	10547 - 10850	23' /69 shots	5000 gal HCL & 150000 lbs Power Prop 20/40
Stage #6	10888 - 11121	22' /66 shots	5000 gal HCL & 160000 lbs Power Prop 20/40
Stage #5	11157 - 11429	23' /69 shots	5000 gal HCL & 160000 lbs Power Prop 20/40
Stage #4	11480 - 11731	21' /63 shots	5000 gal HCL & 160000 lbs Power Prop 20/40
Stage #3	11759 - 12039	21' /63 shots	5000 gal HCL & 140000 lbs Power Prop 20/40
Stage #2	12087 - 12412	23' /69 shots	5000 gal HCL & 150000 lbs Power Prop 20/40
Stage #1	12443 - 12796	23' /69 shots	5000 gal HCL & 150000 lbs Power Prop 20/40

**Proposed WBS**

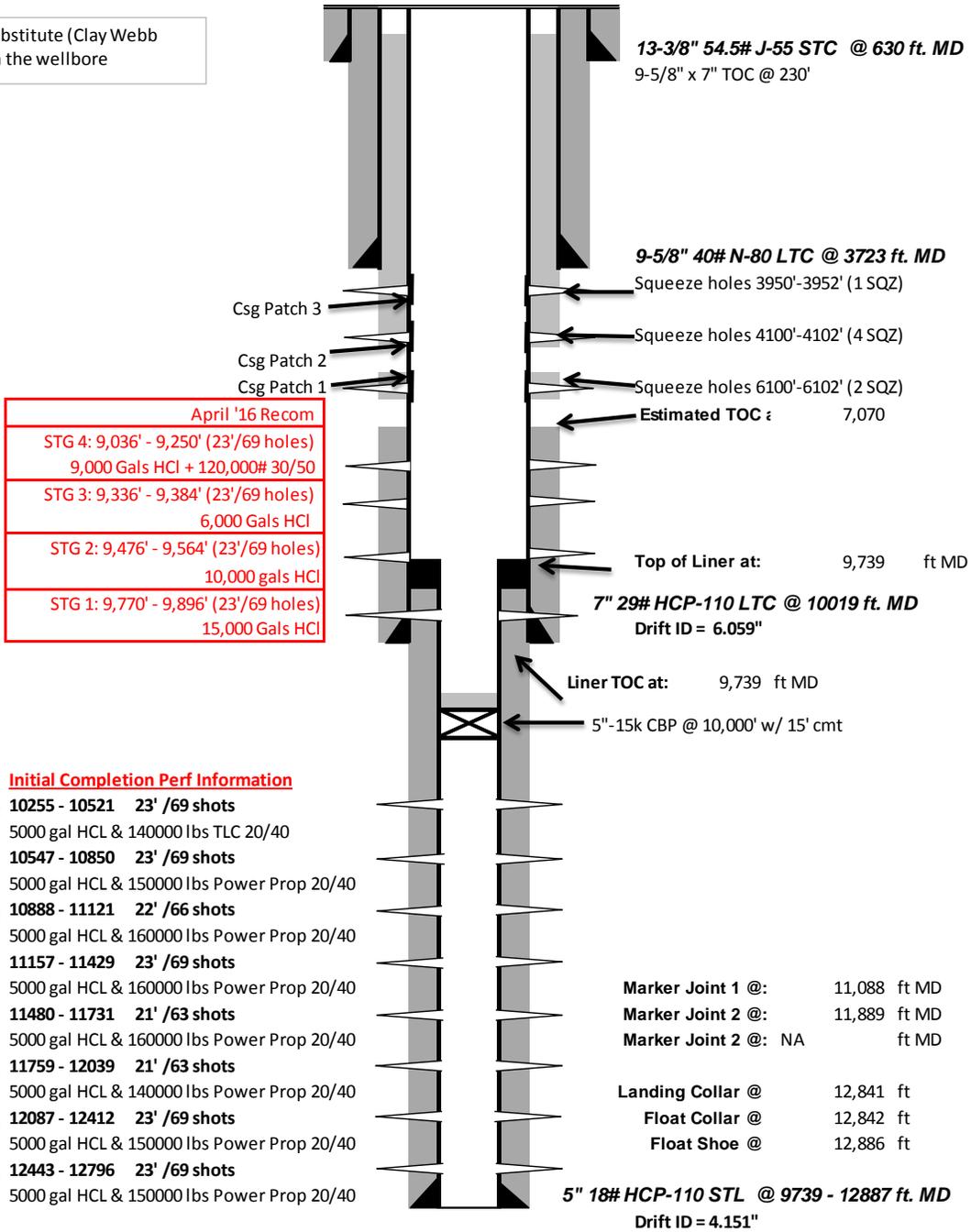


**Proposed Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **3/28/2016**  
 By: **Fondren**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **0**

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



**Initial Completion Perf Information**

<b>Stage #8</b>	<b>10255 - 10521</b>	<b>23' /69 shots</b>
	5000 gal HCL & 140000 lbs TLC 20/40	
<b>Stage #7</b>	<b>10547 - 10850</b>	<b>23' /69 shots</b>
	5000 gal HCL & 150000 lbs Power Prop 20/40	
<b>Stage #6</b>	<b>10888 - 11121</b>	<b>22' /66 shots</b>
	5000 gal HCL & 160000 lbs Power Prop 20/40	
<b>Stage #5</b>	<b>11157 - 11429</b>	<b>23' /69 shots</b>
	5000 gal HCL & 160000 lbs Power Prop 20/40	
<b>Stage #4</b>	<b>11480 - 11731</b>	<b>21' /63 shots</b>
	5000 gal HCL & 160000 lbs Power Prop 20/40	
<b>Stage #3</b>	<b>11759 - 12039</b>	<b>21' /63 shots</b>
	5000 gal HCL & 140000 lbs Power Prop 20/40	
<b>Stage #2</b>	<b>12087 - 12412</b>	<b>23' /69 shots</b>
	5000 gal HCL & 150000 lbs Power Prop 20/40	
<b>Stage #1</b>	<b>12443 - 12796</b>	<b>23' /69 shots</b>
	5000 gal HCL & 150000 lbs Power Prop 20/40	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-1746
1. TYPE OF WELL Oil Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.	7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston, TX, 77002	8. WELL NAME and NUMBER: DW Landfill 3-33B4
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0800 FSL 1700 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 33 Township: 02.0S Range: 04.0W Meridian: U	9. API NUMBER: 43013529030000
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: 4/3/2016	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input checked="" 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 checked="" 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 type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

Please see the attached REVISED recom procedure and current and subsequent wellbore diagrams. We are revising the already approved Sundry #70609 because the first stage perf interval has been increased 63 feet with an addition treatment of 7000 gallons of acid.

**Approved by the**  
**April 01, 2016**  
**Oil, Gas and Mining**

Date: \_\_\_\_\_  
 By:

NAME (PLEASE PRINT) Linda Renken	PHONE NUMBER 713 997-5138	TITLE Sr. Regulatory Analyst
SIGNATURE N/A	DATE 4/1/2016	

## DW Landfill 3-33 B4 Recom Summary Procedure

- POOH with rods, pump & tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing and joints of rods.
- Set casing patches across December 2014 to January 2015 squeeze holes at 6,000'-6,002', 4,100'-4,102' and 3,950'-3,952'.
- Pressure test csg.
- Set 15k CBP for 5" 18# casing @ 10,000' w/ 15' cement dump bailed on plug.
- Stage 1:
  - Perforate new UW/LGR interval from **9,773' – 9,968'**.
  - Acid Frac Perforations with **22,000** gals 15% HCl acid (Stage 1 Recom).
- Stage 2:
  - RIH with 7" CBP & set @ **9,579'**.
  - Perforate new LGR interval from **9,476' – 9,564'**.
  - Acid Frac Perforations with **10,000** gals 15% HCl acid (Stage 2 Recom).
- Stage 3:
  - RIH w/ 7" CBP & set @ **9,399'**.
  - Perforate new LGR interval from **9,336' – 9,384'**.
  - Acid Frac Perforations with **6,000** gals 15% HCL acid (Stage 3 Recom)
- Stage 4:
  - RIH w/ 7" CBP & set @ **9,265'**.
  - Perforate new LGR interval from **9,036' – 9,250'**.
  - Prop Frac perforations with with **120,000** lbs 30/50 prop (w/ **6,000** lbs 100 mesh & **9,000** gals 15% HCl acid) (Stage 4 Recom).
- Clean out well drilling up (3) 7" CBPs, leaving 5" 15k CBP @ 10,000' w/ 15' CMT. (New PBTD @ 9,985'). Top perf BELOW plugs @ 10,255'.
- RIH w/ production tubing and rods.
- Clean location and resume production.

**Current WBS**



**Current Pumping Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

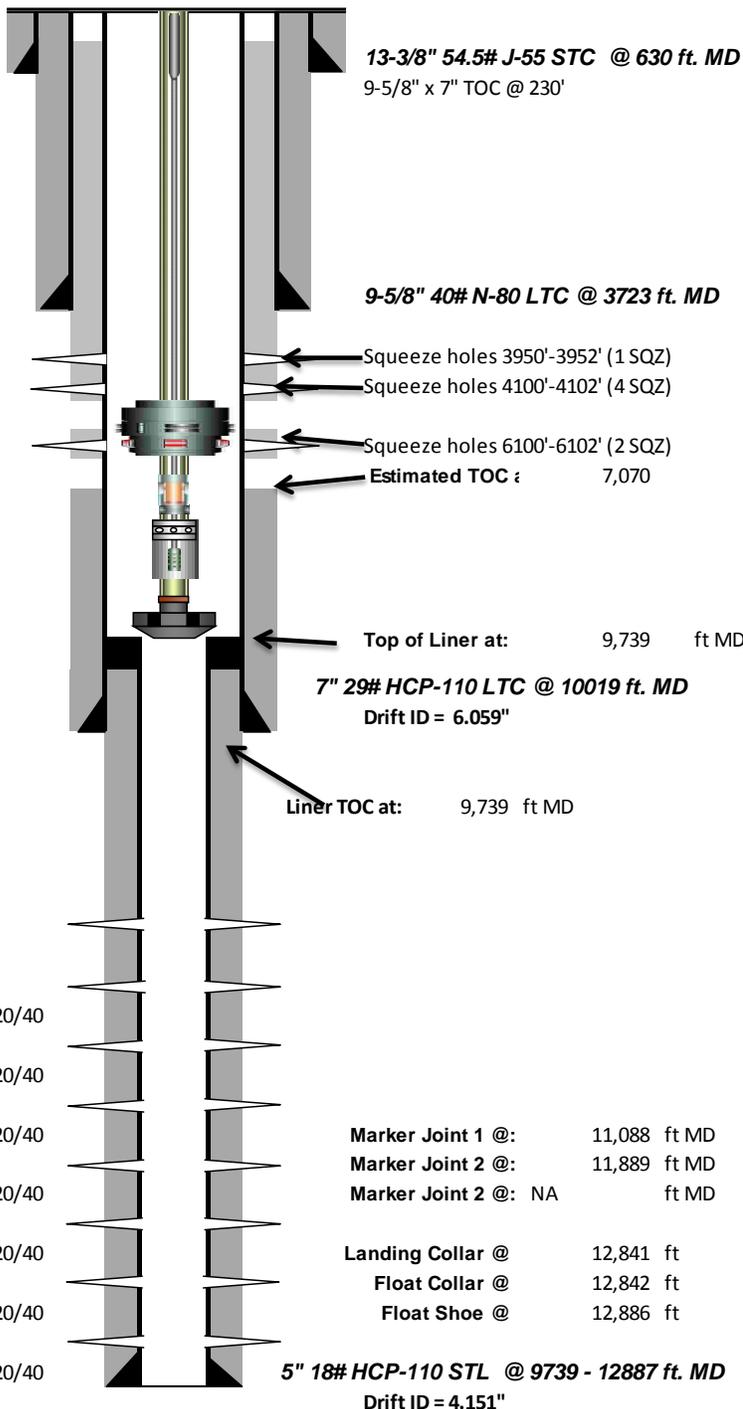
Last Updated: **9/15/2015**  
 By: **Krug**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **0**

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

**-252 Jts 2-7/8" 6.5# N-80 8rd Tubing**

**Rod Detail @ 4.3 SPM**  
 1-1/2" x 40' Polished Rod  
 1,180' - 18/16" CoRod-semi SE  
 1,400' - 17/16" CoRod-semi SE  
 1,638' - 16/16" CoRod-semi SE  
 3,992' - 15/16" CoRod-semi SE  
 40' 16/16" CoRod-semi SE  
 1,230' - 17/16" CoRod-semi SE  
 3' Stabilizer Sub

**Tubing Anchor @ 9,460'**  
 4 jts 2-7/8" 6.5# L-80 8rd Tubing  
 4' x 2-7/8" pup joint  
**Seating Nipple @ 9,598'**  
 2' x 2 7/8" Tubing Sub  
 5 1/2" x 32" PBGA  
 2 jt 2-7/8" Mud Anchor  
 5 3/4" No-Go Nipple  
**Slolid Plug / EOT @ 9,700'**



**Initial Completion Perf Information**

Stage #	Interval	Shots	Fluids
Stage #8	10255 - 10521	23' /69 shots	5000 gal HCL & 140000 lbs TLC 20/40
Stage #7	10547 - 10850	23' /69 shots	5000 gal HCL & 150000 lbs Power Prop 20/40
Stage #6	10888 - 11121	22' /66 shots	5000 gal HCL & 160000 lbs Power Prop 20/40
Stage #5	11157 - 11429	23' /69 shots	5000 gal HCL & 160000 lbs Power Prop 20/40
Stage #4	11480 - 11731	21' /63 shots	5000 gal HCL & 160000 lbs Power Prop 20/40
Stage #3	11759 - 12039	21' /63 shots	5000 gal HCL & 140000 lbs Power Prop 20/40
Stage #2	12087 - 12412	23' /69 shots	5000 gal HCL & 150000 lbs Power Prop 20/40
Stage #1	12443 - 12796	23' /69 shots	5000 gal HCL & 150000 lbs Power Prop 20/40

**Proposed WBS**

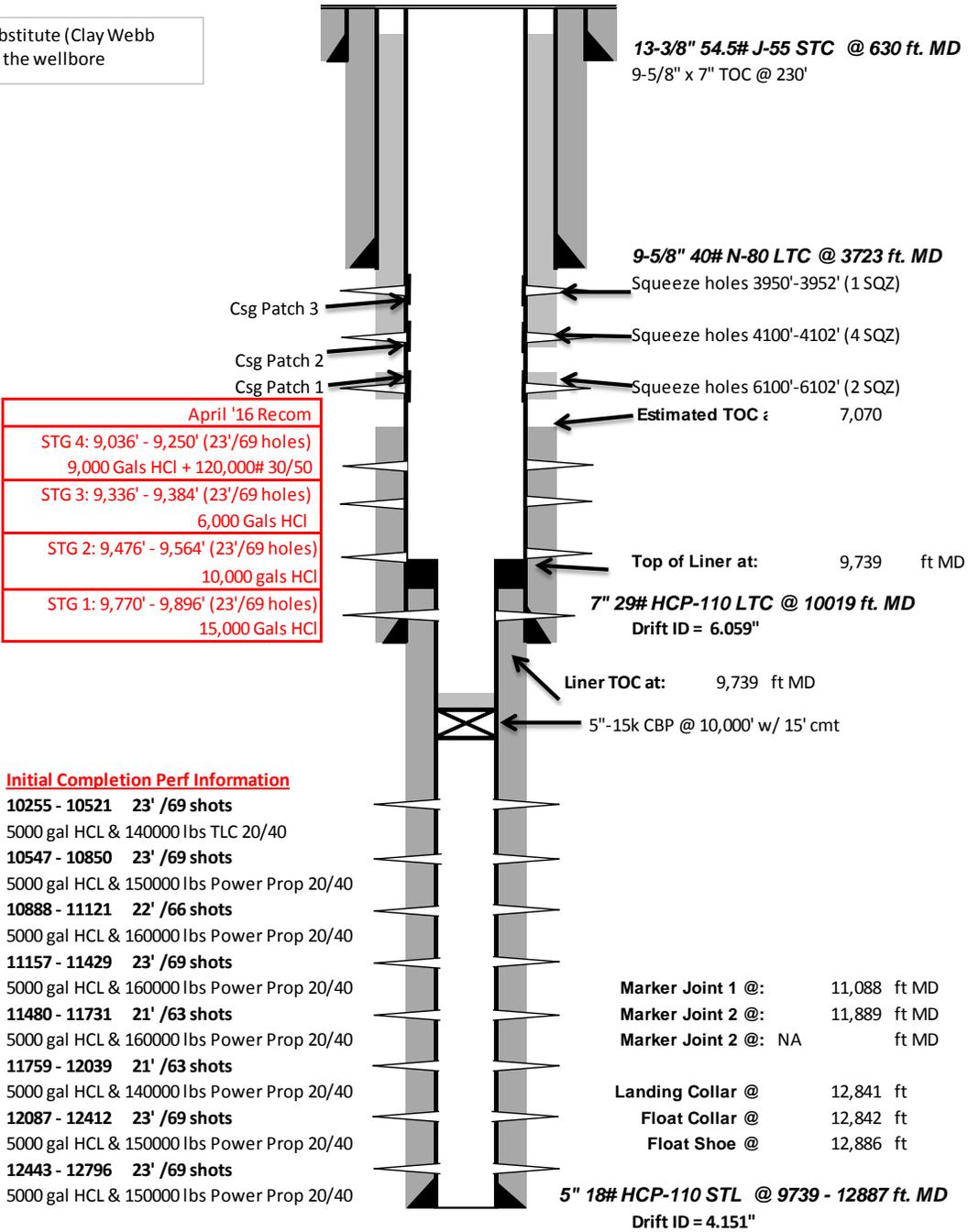


**Proposed Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **3/28/2016**  
 By: **Fondren**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **0**

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



April '16 Recom	
STG 4: 9,036' - 9,250' (23'/69 holes)	9,000 Gals HCl + 120,000# 30/50
STG 3: 9,336' - 9,384' (23'/69 holes)	6,000 Gals HCl
STG 2: 9,476' - 9,564' (23'/69 holes)	10,000 gals HCl
STG 1: 9,770' - 9,896' (23'/69 holes)	15,000 Gals HCl

**Initial Completion Perf Information**

- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
- Stage #7** 10547 - 10850 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #6** 10888 - 11121 22' /66 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #5** 11157 - 11429 23' /69 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #4** 11480 - 11731 21' /63 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
- Stage #3** 11759 - 12039 21' /63 shots  
5000 gal HCL & 140000 lbs Power Prop 20/40
- Stage #2** 12087 - 12412 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
- Stage #1** 12443 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 14-20-H62-1746
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Ute  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> DW Landfill 3-33B4
<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.	<b>9. API NUMBER:</b> 43013529030000
<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana , Houston, TX, 77002	<b>PHONE NUMBER:</b> 713 997-5138 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0800 FSL 1700 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 33 Township: 02.0S Range: 04.0W Meridian: U	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT  <b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 4/27/2016  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>

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

This is a change of plans to approved sundry 70609. Please see attached the revised procedure and the current and proposed WBD's.

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

Date: April 28, 2016  
 By: Derek Duff

<b>NAME (PLEASE PRINT)</b> Linda Renken	<b>PHONE NUMBER</b> 713 997-5138	<b>TITLE</b> Sr. Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/26/2016	

## DW Landfill 3-33 B4 Recom Summary Procedure

- POOH with rods, pump & tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing and joints of rods.
- Set 15k CBP for 5" 18# casing @ 10,000' w/ 15' cement dump bailed on plug.
- Attempted to set casing patches across December 2014 to January 2015 squeeze holes at 6,000'-6,002', patch failed.
- Milled out damaged casing patch with 6" bit to liner 9,739'.
- PU 4-1/8" and clean out to new pbtd @9,985'.
- Pressure test csg to 1,000 psi. Good test.
- PU 4.5" frac string with 7" packer. Set packer at 6,300'.
- Stage 1:
  - Perforate new UW/LGR interval from **9,773' – 9,968'**.
  - Acid Frac Perforations with **22,000** gals 15% HCl acid (Stage 1 Recom).
  - Set sand plug over stg 1.
- Stage 2:
  - RIH with 7" CBP & set @ **9,579'**.
  - Perforate new LGR interval from **9,476' – 9,564'**.
  - Acid Frac Perforations with **10,000** gals 15% HCl acid (Stage 2 Recom).
  - Set sand plug over stg 2.
- Stage 3:
  - RIH w/ 7" CBP & set @ **9,399'**.
  - Perforate new LGR interval from **9,336' – 9,384'**.
  - Acid Frac Perforations with **6,000** gals 15% HCL acid (Stage 3 Recom).
  - Set sand plug over stg 3.
- Stage 4:
  - RIH w/ 7" CBP & set @ **9,265'**.
  - Perforate new LGR interval from **9,036' – 9,250'**.
  - Prop Frac perforations with with **120,000** lbs 30/50 prop (w/ **6,000** lbs 100 mesh & **9,000** gals 15% HCl acid) (Stage 4 Recom).
- Flowback well
- Clean out well cleaning out sand plugs to new PBTD @ 9,985', leaving 5" 15k CBP @ 10,000' w/ 15' CMT. Top perf BELOW plugs @ 10,255'.
- RIH w/ production tubing and rods.
- Clean location and resume production.



**Current Pumping Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

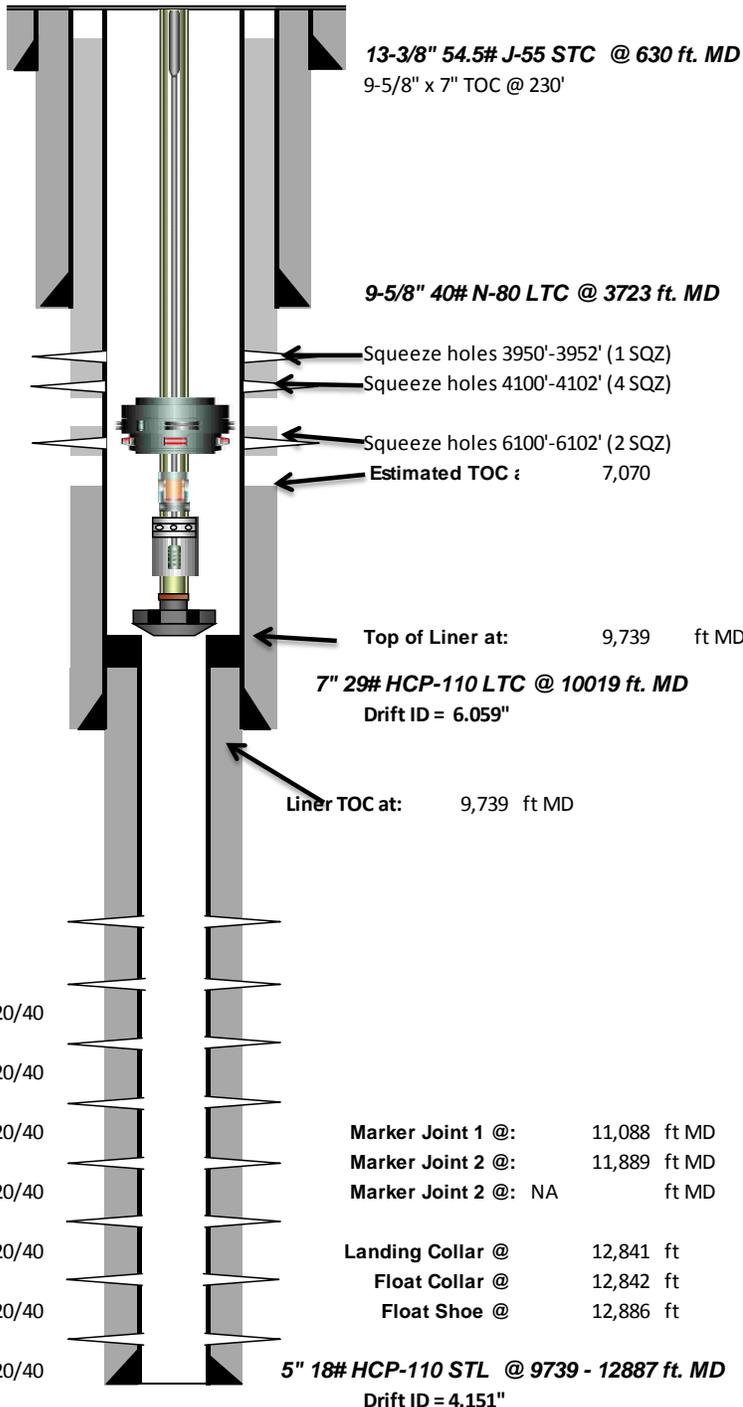
Last Updated: **9/15/2015**  
 By: **Krug**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **0**

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

**-252 Jts 2-7/8" 6.5# N-80 8rd Tubing**

**Rod Detail @ 4.3 SPM**  
 1-1/2" x 40' Polished Rod  
 1,180' - 18/16" CoRod-semi SE  
 1,400' - 17/16" CoRod-semi SE  
 1,638' - 16/16" CoRod-semi SE  
 3,992' - 15/16" CoRod-semi SE  
 40' 16/16" CoRod-semi SE  
 1,230' - 17/16" CoRod-semi SE  
 3' Stabilizer Sub

**Tubing Anchor @ 9,460'**  
 4 jts 2-7/8" 6.5# L-80 8rd Tubing  
 4' x 2-7/8" pup joint  
**Seating Nipple @ 9,598'**  
 2' x 2 7/8" Tubing Sub  
 5 1/2" x 32' PBGA  
 2 jt 2-7/8" Mud Anchor  
 5 3/4" No-Go Nipple  
**Slolid Plug / EOT @ 9,700'**



- Initial Completion Perf Information**
- Stage #8** 10255 - 10521 23' /69 shots  
5000 gal HCL & 140000 lbs TLC 20/40
  - Stage #7** 10547 - 10850 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
  - Stage #6** 10888 - 11121 22' /66 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
  - Stage #5** 11157 - 11429 23' /69 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
  - Stage #4** 11480 - 11731 21' /63 shots  
5000 gal HCL & 160000 lbs Power Prop 20/40
  - Stage #3** 11759 - 12039 21' /63 shots  
5000 gal HCL & 140000 lbs Power Prop 20/40
  - Stage #2** 12087 - 12412 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40
  - Stage #1** 12443 - 12796 23' /69 shots  
5000 gal HCL & 150000 lbs Power Prop 20/40

**Proposed WBS**



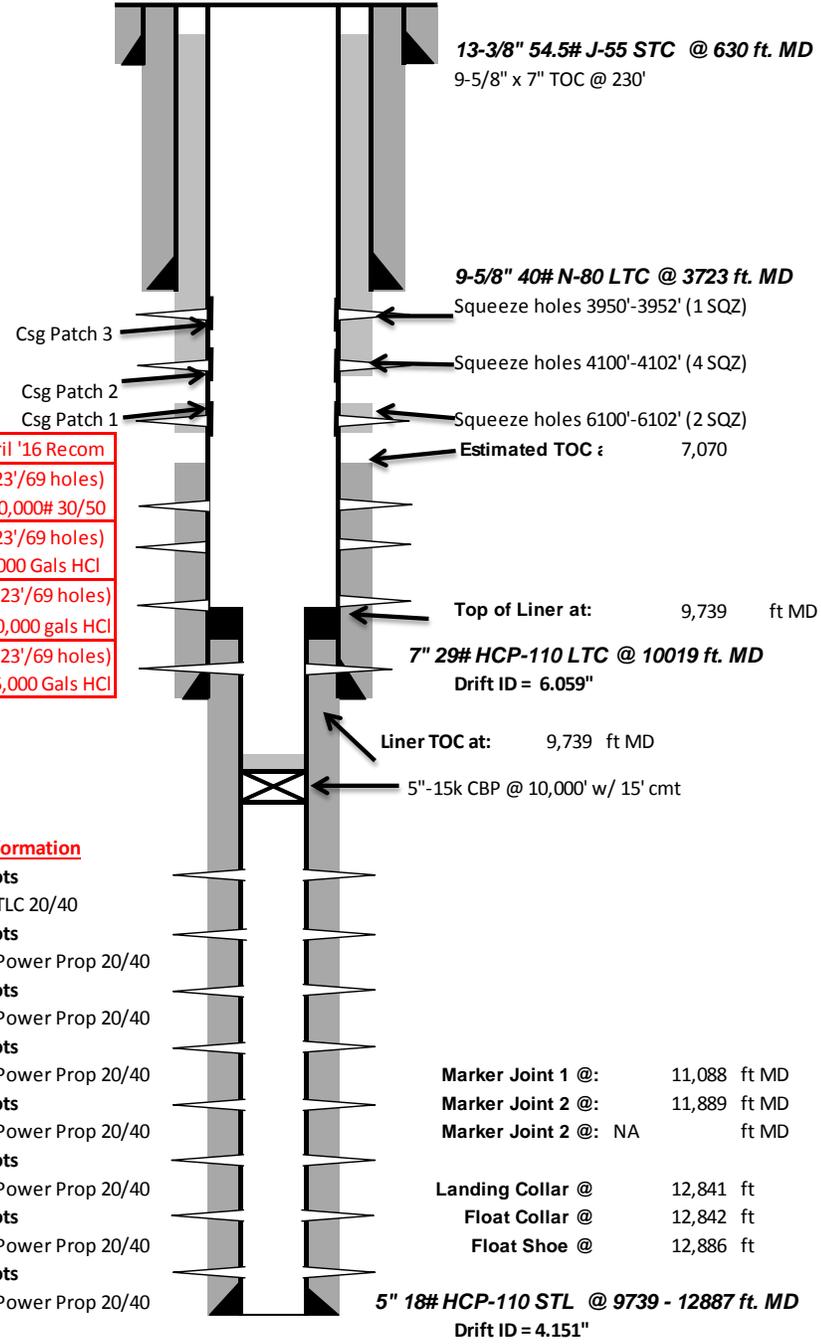
**Proposed Wellbore Schematic**

Well Name: **DW Landfill 3-33B4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne, UT**  
 Surface Location: **Lat: 40°15'31.560" N Long: 110°20'40.465" W**  
 Producing Zone(s): **Wasatch**

Last Updated: **3/28/2016**  
 By: **Fondren**  
 TD: **12,886**  
 API: **43013529030000**  
 AFE: **0**

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

<b>April '16 Recom</b>
STG 4: 9,036' - 9,250' (23'/69 holes) 9,000 Gals HCl + 120,000# 30/50
STG 3: 9,336' - 9,384' (23'/69 holes) 6,000 Gals HCl
STG 2: 9,476' - 9,564' (23'/69 holes) 10,000 gals HCl
STG 1: 9,770' - 9,896' (23'/69 holes) 15,000 Gals HCl



**Initial Completion Perf Information**

<b>Stage #8</b>	<b>10255 - 10521</b>	<b>23' /69 shots</b>
	5000 gal HCL & 140000 lbs TLC 20/40	
<b>Stage #7</b>	<b>10547 - 10850</b>	<b>23' /69 shots</b>
	5000 gal HCL & 150000 lbs Power Prop 20/40	
<b>Stage #6</b>	<b>10888 - 11121</b>	<b>22' /66 shots</b>
	5000 gal HCL & 160000 lbs Power Prop 20/40	
<b>Stage #5</b>	<b>11157 - 11429</b>	<b>23' /69 shots</b>
	5000 gal HCL & 160000 lbs Power Prop 20/40	
<b>Stage #4</b>	<b>11480 - 11731</b>	<b>21' /63 shots</b>
	5000 gal HCL & 160000 lbs Power Prop 20/40	
<b>Stage #3</b>	<b>11759 - 12039</b>	<b>21' /63 shots</b>
	5000 gal HCL & 140000 lbs Power Prop 20/40	
<b>Stage #2</b>	<b>12087 - 12412</b>	<b>23' /69 shots</b>
	5000 gal HCL & 150000 lbs Power Prop 20/40	
<b>Stage #1</b>	<b>12443 - 12796</b>	<b>23' /69 shots</b>
	5000 gal HCL & 150000 lbs Power Prop 20/40	

Marker Joint 1 @: 11,088 ft MD  
 Marker Joint 2 @: 11,889 ft MD  
 Marker Joint 2 @: NA ft MD  
 Landing Collar @ 12,841 ft  
 Float Collar @ 12,842 ft  
 Float Shoe @ 12,886 ft

**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:

U . S . B . & M .

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.**

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

**29. ENCLOSED ATTACHMENTS:**

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

**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



## 1 General

### 1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

### 1.2 Well Information

Well	DW LANDFILL 3-33B4		
Project	ALTAMONT FIELD	Site	DW LANDFILL 3-33B4
Rig Name/No.		Event	RECOMPLETE LAND
Start date	4/13/2016	End date	5/25/2016
Spud Date/Time	8/11/2014	UWI	DW LANDFILL 3-33B4
Active datum	KB @6,134.0usft (above Mean Sea Level)		
Afe No./Description	166586/54827 / DW LANDFILL 3-33B4		

## 2 Summary

### 2.1 Operation Summary

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
4/6/2016	6:00 8:00	2.00	MIRU	28		P		WAIT ON EQUIPMENT. HELD SAFETY MEETING ON SLIDING BACK ROTAFLEX. FILLED OUT AND REVIEWED JSA.
	8:00 9:30	1.50	MIRU	18		P		CLAMP OFF RODS. SLIDE BACK ROTA-FLEX, 50 CSIP. OPENED 7" CSG. CASING STARTED FLOWING A LITTLE OIL SHUT IN CSG..
	9:00 10:30	1.50	MIRU	18		P		SPOTTED FLOWBACK TANK AND RAN FLOW BACK LINE.
	10:30 12:30	2.00	WBP	06		P		PUMPED 25 GALS PARAFFIN SOLVENT AND 90 BBLs 2% KCL @ 1200 PSI @ 1/2 BPM. CLOSED IN WELL. CLOSED CSG VALVES W/600 PSI. LEFT TBG OPEN TO TREATER. CLEANED OUT CELLAR SDFN.
4/7/2016	6:00 7:30	1.50	MIRU	28		P		CT TGSM & JSA ( CO ROD OPERATIONS )
	7:30 11:30	4.00	MIRU	01		P		SPOT IN RU CO ROD RIG, PUMP 65 BBLs DOWN CASING @ 1000 PSI, RU RIG. WORK PUMP OFF SEAT L/D P ROD AND SUBS. FLUSH TBG W/ 25 BBLs 25 GAL P/S, 140 BBLs KCL.
	11:30 15:00	3.50	WOR	39		P		POOH W/ 1470 #8, 1400 #7, 2900 #6, 6100 #5, 1362 #6, ON / OFF TOOL, L/D & RETIRE 2" X 1/2" X 38' RHBC HVF PUMP. RD CO ROD RIG.
	15:00 18:00	3.00	WOR	16		P		MIRU WORK OVER RIG. ND WELL HEAD, TEMPORARY LAND TBG IN COMPRESSION, W/ HANGER. NU BOP. TEST FLANGE TO 4K, W/ HOT OILER. RU WORK FLOOR & TBG EQUIPMENT, RELEASE TAC @ 11,873'. SHUT AND LOCK PIPE RAMS. INSTALL TIW VALVE. RELEASE RIG CREW.
	18:00 20:00	2.00	WOR	06		P		CIRCULATE WELL W/ 25 GAL P/S 400 BBLs KCL @ 250 DEG. SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT CASING VALVES AND INSTALL NIGHT CAPS, LEAVE CASING TO FACILITIES.
4/8/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( PULLING AND RUNNING TBG )
	7:30 12:30	5.00	WOR	39		P		POOH W/ 284 JTS 2 7/8" 8RD, X/O TO 2 3/8", 82 JTS 2 3/8", 1/4 TURN TAC, 4 JTS, 4' PUP, PSN, 2' PUP, DE SANDER, 2 JTS, 2 3/8" BULL PLUG. ( STOP AND CIRCULATE AS NEEDED WELL TRYING TO FLOW )
	12:30 20:00	7.50	WOR	39		P		PUMU & RIH W/ 6" MILL, 7" CASING SCRAPER, X/O, STRING MILL, X/O, 6' 2 7/8" 8RD PUP JT, 299 JTS 2 7/8" 8RD, TAG LINER TOP @ 9752', POOH W/ 114 JTS 2 7/8" RU POWER SWIVEL REAM FROM 5976' TO 6038'. SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT CASING VALVES AND INSTALL NIGHT CAPS, LEAVE CASING TO FACILITIES.

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
4/9/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( POWER SWIVEL OPERATIONS )
	7:30 12:00	4.50	WOR	39		P		CIRCULATE WELL CLEAN W/ 240 BBLS, POOH W/ 58 JTS RU SWIVEL, REAM FROM 4074' TO 4139'. TIGHT SPOT @ 4095' TM. RD SWIVEL POOH W/ 3 JTS RU SWIVEL, REAM FROM 3911' TO 3975'. RD SWIVEL POOH W/ 124 JTS 2 7/8", L/D MILL ASSEMBLY.
	12:00 18:30	6.50	WLWORK	26		P		RIH W/ MULTI SENSOR, 40 ARM CALIPER, GAMMA RAY, CCL LOG. LOG FROM 6144' TO 5632', & 4301' TO 3700', REPEAT PASS FROM 3982' TO 4183'. POOH, RIH W/ 4 1/8" GR TO 10,015', RIH W/ 5" MAGNA 15K CBP SET AT 10,000', RIH W/ DUMP BAILER ( DUMP BAIL 15' CEMENT ) POOH, SHUT AND LOCK BLIND RAMS, SHUT AND BULL PLUG CASING VALVES.
4/10/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( PU PATCH )
	7:30 14:00	6.50	WOR	39		P		PUMU AND RIH W/ 20' HOMCO PATCH, SETTING TOOL, 2 JTS, BUMPER SUB, SLIDING VALVE, 2 JTS, 2' PUP JT, 182 JTS 2 7/8". RU WIRE LINE RIH W/ GAMMA RAY/CCL LOG CORRELATE DEPTHS W/ PERFORATORS 12/09/14 GAMMA RAY CCL CBL LOG AS PER PROCEDURE. RD WIRELINE.
	14:00 20:30	6.50	WOR	39		P		PU TBG 3', SET PATCH @ 6109' TO 6129' TUBING MEASUREMENT AND 6091' TO 6111' WIRE LINE MEASUREMENT ( WIRE LINE MEASUREMENTS CORRELATED TO LOG ABOVE. ) POOH W/ 182 JTS, LAY DOWN BHA. PUMU AND RIH W/ 7" HD PACKER, 128 JTS 2 7/8". CIRCULATE CLEAN. SET PACKER @ 4193'. HOLD 1000 PSI ON CASING. ATTEMPT TO TEST TO 8000 PSIG. LOST 2200 PSI IN 15 MINUTES. SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT CASING VALVES AND INSTALL NIGHT CAPS.
4/11/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( PRESSURE )
	7:30 12:30	5.00	WOR	39		P		PRESSURE UP CASING TO 1000 PSIG, RE ATTEMPT TO TEST PATCH DOWN TBG PRESSURE BUILT UP TO 3600 PSI, DROPPED TO 3200 PSI @ 1/4 BPM. RELEASE PACKER RIH AND SET PACKER @ 6103' RE ATTEMPT TO TEST SAME RESULTS RELEASE AND RE SET PACKER @ 6108' 1' ABOVE PATCH, RE ATTEMPT TEST W/ SAME RESULTS.
	12:30 15:30	3.00	WOR	39		P		RELEASE PACKER, POOH W/ 186 TTL JTS, L/D PACKER. SHUT AND LOCK BLIND RAMS. SHUT AND BULL PLUG CASING VALVES.
4/12/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( PU BHA PINCH POINTS )
	7:30 11:30	4.00	WOR	39		P		PUMU & RIH W/ NOSE, 6 1/16" COLLET, EXTENSION, X/O, X/O, 3 1/2" DCS, BUMPER SUB, JAR, 3 1/2" DCS, X/O 6' PUP JT, 185 JTS 2 7/8". TAG PATCH @ 6108', WORK IN 14' TO 6122' AND STOP MAKING HOLE.
	11:30 13:00	1.50	WOR	39		P		POOH W/ 185 JTS AND BHA. CHANGE OUT COLLET TO 5 15/16"
	13:00 16:30	3.50	WOR	39		P		RIH W/ NOSE, 5 15/16" COLLET, EXTENSION, X/O, X/O, 3 1/2" DCS, BUMPER SUB, JAR, 3 1/2" DCS, X/O 6' PUP JT, PERF PUP JOINT, 185 JTS 2 7/8". TAG @ 6122'. ATTEMPT TO GET THROUGH W/ NO SUCCESS.
	16:30 19:00	2.50	WOR	39		P		POOH W/ 145 JTS 2 7/8". SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS.
4/13/2016	9:00 10:00	1.00	WOR	28		P		CT TGSM & JSA ( PINCH POINTS PU BHA )
	10:00 13:00	3.00	WLWORK	18		P		POOH W/ 40 JTS AND BHA. MIRU WIRELINE UNIT. TIH W/ 3 1/8" SINKER BAR W/ CCL. TAG @ 6108' WIRE LINE UN CORRELATED DEPTH. ATTEMPT TO WORK THROUGH W/ NO SUCCESS. POOH RD WIRE LINE.
	13:00 19:00	6.00	WOR	39		P		PUMU & RIH W/ 4 13/16" TAPERED MILL X/O, 6 1/8" PILOT MILL, 4-4 3/4" DCS, X/O TO 8RD, 6' PUP JT, 182 JTS RU POWER SWIVEL W/ JT# 183'. TAG @ 6122' PU. SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS.
4/14/2016	6:00 6:30	0.50	WOR	28		P	EP SAFETY MEETING AT PEAK SHOP	

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	6:30 7:30	1.00	WOR	28		P		CT TGSM & JSA ( POWER SWIVEL OPERATIONS )
	7:30 19:30	12.00	WOR	06		P		BREAK CIRCULATION DRILL PATCH FROM 6122' TO 6133' CIRCULATE WELL CLEAN. BREAK CONNECTION. INSTALL & SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS.
4/15/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( POWER SWIVEL OPERATIONS )
	7:30 15:30	8.00	WOR	40		P		BREAK CIRCULATION START DRILLING AT 6133' TO 6136' PLUGGED TUBING RD SWIVEL.
	15:30 20:00	4.50	WOR	39		P		POOH W/ 183 JTS AND BHA. L/D PLUGGED MILL ASSEMBLY. MU & RIH W/ 6 1/8" SHOE, 5 3/4" 10' WASH OVER PUP JT, TOP SUB, 4 4 3/4" DCS, X/O, 6' PUP JT, 37 JTS 2 7/8" 8RD. INSTALL & SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS.
4/16/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( MISCOMMUNICATION )
	7:30 9:00	1.50	WOR	39		P		RIH W/ 147 JTS 2 7/8" 8RD, RU SWIVEL AND TAG @ 6135
	9:00 15:00	6.00	WOR	40		P		BREAK CIRCULATION DRILL UP PATCH FELL THROUGH @ 6,143'. CIRCULATE CLEAN. RACK OUT SWIVEL.
	15:00 20:00	5.00	WOR	39		P		RIH W/ 4 JTS DID NOT TAG. POOH W/ 183 JTS AND L/D BHA AND SHOE ASSEMBLY. SHUT AND LOCK BLIND RAMS. SHUT AND BULL PLUG CASING VALVES. CREW TRAVEL
4/17/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( TAG LINES AND PINCH POINTS )
	7:30 12:30	5.00	WOR	39		P		PUMU & RIH W/ 6" BIT BIT SUB, PSN, 6' PUP, TIH W/ 209 JTS 2 7/8" 8RD, TAG LINER TOP @ 9739' (9752' SLM) L/D 3 JTS TEST CASING TO 1000 PSIG FOR 15 MINUTES GOOD TEST. POOH W/ 206 JTS AND BHA.
	12:30 18:30	6.00	WOR	39		P		PUMU & RIH W/ 4 1/8" BIT, BIT SUB, 2 3/8" PSN, 4' PUP, 16 JTS 2 3/8" X/O TO 2 7/8", 2GH OBSTRUCTION W/ NO SUCCESS. RU POWER SWIVEL BREAK CIRCULATION. CLEAN OUT TO PBD @ 9847' SLM RD SWIVEL, POOH W/ 8 JTS. INSTALL & SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL
4/18/2016	6:00 6:00	24.00	WOR	18		P		NO ACTIVITY SDFWE
4/19/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( FALL PROTECTION )
	7:30 10:30	3.00	WOR	39		P		RIH W/ 1 JT THROUGH LINER TOP NO TAG, POOH W/ 284 JTS X/O TO 2 3/8", 16 JTS 2 3/8"
	10:30 14:00	3.50	WOR	39		P		TIH W/ 7" HD PACKER, PSN, 190 JTS 2 7/8" 8RD, SET PACKER @ 6,214'. FILL CASING HOLD 1000 PSIG, TEST FROM 6,214 TO PBD TO 8000 PSIG, LOST 200 PSI IN 15 MINUTES, BUMP UP TO 8000 SAME RESULTS. RELEASE PACKER.
	14:00 17:00	3.00	WOR	39		P		TOOH W/ 190 JTS L/D PSN & PACKER. INSTALL & SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL
4/20/2016	6:00 7:30	1.50	WOR	39		P		CT TGSM & JSA ( HYDRO TESTING )
	7:30 13:30	6.00	WOR	39		P		PLUG TEST 2 JTS 2 7/8" TBG, PSN, 7"HD PKR- OK. RIH W/ 7"HD PKR, PSN, 4 JTS 2 7/8" TBG, RU HYDRO TESTER, PU HYDRO TEST TOOLS. CONT TIH HYDRO TESTING W/ 114 JTS 2 7/8" TBG- GOT DIRTY. POOH W HYDRO TEST TOOLS. TIH W/ 178 JTS 2 7/8" TBG.EOT@9665'
	13:30 17:30	4.00	WOR	39		P		FLUSH TBG W/ 60 BBLs. TOOH W/ 178 JTS 2 7/8" TBG FLUSHING SEVERAL TIMES.
	17:30 19:30	2.00	WOR	39		P		RIH W/ HYDRO TEST TOOLS. CONT TIH TESTING W/ 6 JTS, PULL TOOLS FOR WAX. REMOVE WATER SAVER RUBBERS, CONT TIH HYDRO TESTING W/ 32 JTS 2 7/8" TBG. POOH W/ HYDRO TEST TOOLS. EOT@5109' SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
4/21/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( PINCH POINTS )
	7:30 11:30	4.00	WOR	39		P		CIH HYDRO TESTING W/ 142 JTS 2 7/8" TBG. EOT@9726'. RD HYDRO TESTER, LD HYDRO TEST TOOLS.
	11:30 14:00	2.50	WOR	08		P		SET 7" HD PKR W/30,000# COMP@9719'. PRESS UP TBG TO 4000 PSI W/ RIG PUMP, CSG TO 1000 PSI. RU WEATHERFORD TEST UNIT, PRESS UP 8000 PSI. LEAK @TIW. BLEED OFF, FIX LEAK. PRESS UP TO 8000 PSI. 1ST TEST LOST 900 PSI. BUMP UP, 2ND TEST LOST 600 PSI. BUMP UP, 3RD TEST LOST 400 PSI. BLEED TBG PRESS TO 5000 PSI, PUMP UP TO 7000 PSI, LOST PRESS DURING TEST, GAINING ON CSG PRESS. BLEED DOWN CSG, TBG FOLLOWED. BLEED OFF TO 0 PSI, RELEASE PKR.
	14:00 18:00	4.00	WOR	39		P		FLUSH TUBING, PUMP DOWN SV, TEST TBG. NO TEST-PUMP 80 BBLs NO PRESS. LD 2 JTS 2 7/8" TBG, TOO H W/ 120 JTS 2 7/8" TBG. SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL
4/22/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( SPOTTING )
	7:30 9:00	1.50	WOR	39		P		CONT TOO H W/ 176 JTS 2 7/8" TBG, LD PKR, PSN-(NOT A +45) NO SV. KLX CHECKED INTO IT AND PACKER CAME FROM ANOTHER BRANCH AND THE HAD SENT PSN TO MACHINE SHOP AND HAD I.D CHANGED TO 2 7/16".
	9:00 13:00	4.00	WOR	18		P		WAIT FOR BRAIDED LINE TRUCK AND FISHING TOOLS. (HELP INSPECT 4 1/2" TBG).
	13:00 15:00	2.00	WOR	52		P		MIRU BRAIDED LINE TRUCK, RIH W/ SKIRTED RETRIEVING TOOL TO SV@ 9982' WORK @ SV 4-5 TIMES. POOH W/ SV, RD BRAIDED LINE.
	15:00 17:30	2.50	WOR	18		P		SHUT AND LOCK BLIND RAMS. SHUT AND BULL PLUG CASING VALVES. FINISH CLEANING AND DRIFTING 4 1/2" TBG. C/O RAMS TO 4 1/2" AND HANDLING EQUIPMENT. FINISH CLEANING AND INSPECTING TBG.
4/23/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( H.E.L.P )
	7:30 16:00	8.50	WOR	24		P		RU FRANKS , PU BHAAS FOLLOWS WLG, 7" AS-1 PKR, 3.5" BLAST SUB, X-OVER(3.5" 8RD X 4.5" LTC), 4' PUP JT (LTC), PROFILE NIPPLE(3.828" ID), X-OVER(4.5" LTC X 4.5" 8RD). CONT PU 1 JT 4.5" TBG, 6' PUP JT (MARKER), 198 JTS 4.5" 8RD TBG. EOT@6310. RD FRANKS
	16:00 21:30	5.50	WLWORK	27		P		FLUSH TBG, RU WIRELINE, RIH W/ WRP- STACKING IN WAX. POOH , RE FLUSH TBG W/ 100 BBLs H2O. RIH W/WRP- FIGHT WAX, SET WRP@6269'. POOH W/ WIRELINE, SETTING TOOL. RD WIRELINE, SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL
4/24/2016	6:00 6:00	24.00	WOR	18		P		NO ACTIVITY SDFWE
4/25/2016	6:00 6:00	24.00	WOR	18		P		NO ACTIVITY SDFWE
4/26/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( PRESSURE TESTING PROCEDURES )
	7:30 11:00	3.50	WOR	18		P		MU 4' PUP JT, DONUT HANGER, 4' PUP JT, 8' PUP JT. LAND TBG, INSTALL BACK PRESS VALVE. RD FLOOR, TBG WORKS, ND 5K BOP'S, 5K- 10K SPOOL, 10K- 10K SPOOL. REMOVE BACK PRESS VALVE, PRESS UP ON TBG- START COMMUNICATING W/ CSG.
	11:00 15:30	4.50	WLWORK	32		P		RU BRAIDED LINE TRUCK, RIH W/ RETRIEVING HEAD - 200' NOT GOING. POOH, ADD 2 WEIGHT BARS, PUMP DOWN W/ HOTOILER TO 4000' SHUT DOWN HOTOILER, CONT RIH TO PLUG@ 6269'. LATCH ON, RELEASE PLUG, POOH W/ SAME.
	15:30 16:30	1.00	WOR	18		P		RD BRAIDED LINE, RU TEST UNIT TO TBG- TEST TBG, CSG TO 5" PLUG - LEAK IS THE SAME AS BEFORE. RD TEST UNIT
	16:30 18:00	1.50	WOR	18		P		RELEASE 7" PKR, NU 10K- 10K SPOOL, 10K- 5K SPOOL, 5K BOP. RU FLOOR, RU HOTOILER TO CIRC DOWN 4 1/2" TBG, UP 7" CSG. RELEASE RIG CREW.

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	18:00 20:00	2.00	WOR	06		P		CIRCULATE DOWN 4 1/2" W/ 250 BBLs KCL. INSTALL & SHUT TIW VALVE, INSTALL NIGHT CAP. SHUT CASING VALVES INSTALL BULL PLUGS ( TBG LANDED W/ HANGER )
4/27/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( COMMUNICATION & BEING RESPONSIBLE FOR YOUR JOB TASK )
	7:30 19:00	11.50	WOR	39		P		RU FRANKS TONGS, UNLAND 4 1/2" TBG, LD DONUT HANGER, PUP JTS. TOO H W/ 101 JTS 4 1/2" TBG(FLUSHED EVERY 300'-550') EOT@3169'. SET PKR, TEST FROM SURFACE - PKR TO 2500 PSI- OK. CONT TOO H W/ 39 JTS 4 1/2" TBG, LD 59 JTS 4 1/2" TBG, PUP JT, 1 JT, X-OVER, PROFILE NIPPLE, PUP JT, X-OVER, PROFILE NIPPLE, PUP JT, X-OVER, BLAST SUB, PKR.
	19:00 22:00	3.00	WOR	39		P		LD 2 JTS FROM DERRICK(BOTTOM JT BAD PIN). MU, PU 7" AS-1 PKR, 3 1/2" BLAST SUB, X-OVER (3 1/2" 8RD X 4 1/2" LTC), 4' PUP JT (LTC), PROFILE NIPPLE(W/ SV IN PLACE), X-OVER( 4 1/2" LTC X 4 1/2" 8RD), 1 JT 4 1/2" TBG, PUP JT, PU 1 JT, TEST TO 4000 PSI - OK. CONT PU 11 JTS 4 1/2" TBG. EOT@460' . SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL
4/28/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( HAND PLACEMENT )
	7:30 16:30	9.00	WOR	39		P		. CONT PU 23 JTS 4 1/2" TBG, TEST TO 7000 PSI- OK(35 JTS, EOT@1143'). CONT PU 23 JTS, TIH W/ 78 JTS 4 1/2" TBG(CHANGE OUT 13 COLLARS). EOT@3570', TEST TO 7000 PSI- OK.TIH W/ 42 JTS 4 1/2" TBG EOT @4892', TEST TO 7000 PSI - OK. TIH W/ 21 JTS 4 1/2" TBG EOT @5584', TEST TO 7000 PSI - OK. TIH,PU 24 JTS 4 1/2" TBG EOT @6312', TEST TO 7000 PSI - OK. RD FRANKS TONGS.
	16:30 20:30	4.00	WLWORK	32		P		RU BRAIDED LINE, RIH W/ RETRIEVING TOOL TO QX PLUG, RETRIEVE MANDREL. POOH W SAME, LD MANDREL. RIH W/ RETRIEVING TOOL, RETRIEVE SLEEVE. POOH W/SAME, RD BRAIDED LINE.
	20:30 0:30	4.00	WOR	18		P		PU 4 1/2" PUP JT, SET PKR @6312' W/ 25,000# COMP. PRESS UP ON CSG TO 1000 PSI, PRESS UP ON TBG. COMMUNICATING W/ CSG. UNLAND TBG, RELEASE PKR. PU 1 JT 4 1/2" TBG EOT @6343', SET PKR W/ 22,000# COMP. TEST TBG, GREATER COMMUNICATION. UNLAND TBG, PULL TENSION INTO PKR, PRESS UP TO 5500 PSI(RAN OUT OF TEST WATER) HOLD FOR 10 MIN(LOST 30 PSI IN 6 MIN). BLEED OFF PRESS,
4/29/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( PRESSURE TESTING )
	7:30 12:00	4.50	WOR	18		P		PRESS TBG TO 7000 PSI. X-OVER , TIW THREADS LEAKING - CLEAN, MU, CHANGE OUT TESTER HOSE, TIW. PRESS UP TBG TO 7000PSI - DROP 400 PSI IN 16 MIN. PRESS UP AGAIN, PUT 1000 PSI ON CSG. TBG PSI DROP TO 5000 PSI IN 29 MIN, CSG IS GAINING 100 PSI/ MIN. KEPT BLEEDING IT DOWN TO 1000 PSI. BLEED OFF PRESS, WAIT FOR WIRELINE.
	12:00 14:30	2.50	WOR	18		P		RU WIRELINE. RIH W/WRP, SET @6297'. POOH W/ SET TOOL, WIRELINE. RD WIRE LINE.
	14:30 18:00	3.50	WOR	18		P		LAND TBG IN 22,000# COMP, PRESS UP ON CSG TO 1000 PSI, PRESS UP ON TBG TO 3000 PSI. BLEED OFF CSG PRESS, TAKE TBG PRESS TO 7000 PSI, LOSE 1000 PSI IN 15 MIN. PRESS UP CSG TO 1000 PSI, PRESS TBG BACK UP TO 7000 PSI. LOSE 400 PSI IN 15/MIN. BLEED OFF CSG PRESS, LOSE 800 PSI FROM TBG IN 32 MIN. PRESS UP TBG TO 7000 PSI- LOSE 150 PSI/ 15 MIN. BLEED OFF PRESS, RU BRAIDED LINE.
	18:00 21:00	3.00	WOR	18		P		RIH, RETRIEVE WRP@ 6297'.POOH W/ SAME,RD BRAIDED LINE. SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL
4/30/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( RELEASING PACKER )

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	7:30 16:00	8.50	WOR	39		P		OPEN WELL. WORK TBG - NO LUCK. RU POWER SWIVEL, WORK TBG FOR 1 1/2 HRS, SHEARED SAFETY ON PKR. HANG BACK SWIVEL, LD 4 1/2" PUP JT, HANGER, PUP JT, 1 JT TBG. 9:00-4:00PM TOOH W/ 64 JTS 4 1/2" TBG, RACK OUT PS. CONT TOOH W/ 76 JTS 4 1/2" TBG, LD 59 JTS 4 1/2" TBG.
	16:00 21:00	5.00	WOR	39		P		PU BHA AS FOLLOWS WLG, 7" AS-1 PKR, 3.5" BLAST SUB, X-OVER(3.5" 8RD X 4.5"LTC), 4' PUP JT (LTC), PROFILE NIPPLE(3.828" ID), X-OVER(4.5" LTC X 4.5" 8RD). CONT PU 1 JT. ( INSTALL BULL PLUG UNDER PACKER RIH TEST BHA TO 7000 PSI ) INSTALL QX PLUGS. PU 58 JTS 4 1/2" TBG. EOT @1871', SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL
5/1/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( COMMUNICATION )
	7:30 15:00	7.50	WOR	39		P		TEST 59 JTS 4 1/2" TBG TO SV TO 7000 PSI - OK. TIH W/ 50 JTS 4 1/2" TBG, FILL, TEST TO SV TO 7000 PSI - OK. TIH W/ 44 JTS 4 1/2" TBG, FILL, TEST TO SV TO 7000 PSI - OK. TIH W/ 44 JTS, PU 4 JTS 4 1/2" TBG, FILL, TEST TO SV TO 7000 PSI - OK. SET 7"AS-1 PKR @6374' W/ 25,000# COMP. PRESS UP CSG TO 1000 PSI, TEST TBG TO 7000 PSI - LOSE 125 PSI/15 MIN. BLEED OFF PRESS, RETEST - OK.
	15:00 17:00	2.00	BL	52		P		RU BRAIDED LINE, RIH TO SV, RETRIEVE STINGER. POOH W/ SAME. RIH TO SV, RETRIEVE SLEEVE. POOH W/ SAME, RD BRAIDED LINE.
	17:00 20:00	3.00	WOR	18		P		PRESS UP CSG TO PKR @6374' TO 1000 PSI. PRESS TEST 4 1/2" TBG TO PBD @9982' TO 4500 PSI W HOT OILER, PRESS UP W/TEST UNIT TO 7000 PSI - 15 MIN -OK. BLEED OFF PRESS, RD TEST UNIT. RD FRANKS TONGS, FLOOR.. SHUT TIW VALVE, INSTALL NIGHT CAP, SHUT AND LOCK PIPE RAMS. SHUT CASING VALVES AND INSTALL NIGHT CAPS. CREW TRAVEL
5/2/2016	6:00 6:00	24.00	WOR	18		P		NO ACTIVITY SDFWE
5/3/2016	7:00 8:00	1.00	WOR	28		P		CT TGSM & JSA ( NU PROCEDURES )
	8:00 13:30	5.50	WOR	16		P		BREAK OUT TIW VALVE, INSTALL BACK PRESSURE VALVE, BARRIERS FOR TUBING AND CASING, # 1 CBP @ 10,000' COVERING EXISTING PERFS, #2 15' CEMENT, #3 WELLBORE FULL OF 2% KCL, BARRIER FOR TUBING #4 BACK PRESSURE VALVE, BARRIERS FOR CASING #4 PACKER, # 5 LANDED W/ HANGER. NU & TEST ALL COMPONENTS STACK TO 7500 PSI HIGH AND 250 LOW.
	13:30 18:30	5.00	WLWORK	21		P		MIRU WIRE LINE TEST LUBE TO 4500 PSI HIGH AND 250 PSI LOW. RIH AND SHOOT THE INTERVALS OF STAGE 1 9,968' TO 9,773' W/ 2 1/2" TAG-RTG GUN ( WITH TITAN'S HMX SDP GUNSLINGER 11 GM CHARGES ) 3 JSPF, AND 120° PHASING. HOLD 1000 PSI PRESSURE WHILE PERFORATING, LOST 200 PSI. ALL PERFORATIONS CORRELATED TO CUTTER RADIAL CEMENT BOND/GAMMA RAY/CCL/TEMP ( RUN #1 9/15/14 ) OVERALL FOOTAGE 23' NET FT, 17 INTERVALS. CASING BARRIERS, #1 PACKER, #2 LANDED W/ HANGER, #3 VALVES SHUT, #4 NIGHT CAP VALVES. TUBING BARRIERS, #1 SHUT MANUEL VALVE, # 2 SHUT AND LOCK HCR VALVE, # 3 FLOW CROSS VALVES SHUT AND NIGHT CAPS INSTALLED, #4 TOP HCR VALVE SHUT AND LOCKED, #5 NIGHT CAP INSTALLED ON TOP OF STACK.
5/4/2016	6:00 6:00	24.00	WOR	18		P		NO ACTIVITY WAITING ON FRAC CREW
5/5/2016	6:00 6:00	24.00	MIRU	01		P		HEAT WATER, SPOT IN FRAC EQUIPMENT AND PARTIAL RU
5/6/2016	6:00 6:30	0.50	MIRU	28		P		TGSM & JSA ( FRAC OPERATIONS )
	6:30 12:30	6.00	MIRU	01		P		FINISH RU HALLIBURTON

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	12:30 14:30	2.00	STG01	35		P		PRESSURE TEST LINES AND EQUIPMENT. SET POP OFFS. SIP @ 1800 PSI, BREAK DOWN STAGE 1 PERFS @ 7.365 BPM @ 5270 PSI. EST RATE TO 23.4 @ 5915 PSI. ISDP 3589, 5/ 3397 10/ 3306 15/ 3226. TREAT STAGE 1 PERFS W/ 22,000 GAL 15% HCL W/ 68 BIO BALLS FOR DIVERSION IN 4 SEPERATE DROPS SPACED OUT EVERY 4,400 GAL. ISDP 3281 F.G .77 1060 BBLS TO RECOVER. AVE HORSE POWER 2753.
	14:30 16:30	2.00	STG01	27		P		SPOT 3,879# 30/50 WHITE SAND. FLUSH TO TOP PERF. LET SIT FOR 1 HR.
	16:30 17:30	1.00	SL	32		P		RIH W/ 2" WT BARS AND CCL, TAG @ 9,881'
	17:30 19:00	1.50	STG01	27		P		SPOT 3,000# 30/50 WHITE SAND. FLUSH TO TOP PERF. LET SIT FOR 1 HR
	19:00 21:00	2.00	SL	32		P		RIH W/ 2" WT BARS AND CCL, TAG @ 9,726'. POOH PU 2 1/2" GUN.
	21:00 22:30	1.50	STG02	21		P		RIH AND SHOOT THE INTERVALS OF STAGE 9,478' TO 9,561' 2 W/ 2 1/2" TAG-RTG GUN ( WITH TITAN'S HMX SDP GUNSLINGER 11 GM CHARGES ) 3 JSPF, AND 120° PHASING. 3100 PSI PRESSURE WHILE PERFORATING, LOST 200 PSI. ALL PERFORATIONS CORRELATED TO CUTTER RADIAL CEMENT BOND/GAMMA RAY/CCL/TEMP ( RUN #1 9/15/14 ) OVERALL FOOTAGE 15' NET FT, 45 INTERVALS.
	22:30 23:30	1.00	STG02	35		P		PRESSURE TEST LINES AND EQUIPMENT. SET POP OFFS. SIP @ 2785 PSI, BREAK DOWN STAGE 2 PERFS @ 12.6 BPM @ 4025 PSI. EST RATE TO 34.9 @ 5977 PSI. ISDP 2,811, 5/ 2,652 10/ 2,670 15/ 2,673. TREAT STAGE 3 PERFS W/ 10,000 GAL 15% HCL W/ 48 BIO BALLS FOR DIVERSION IN 4 SEPERATE DROPS SPACED OUT EVERY 2,000 GAL. ISDP 2353 F.G .68 801 BBLS TO RECOVER. AVE HORSE POWER 2665.
	23:30 0:30	1.00	STG02	27		P		SPOT 6,000 # 30/50 WHITE SAND. FLUSH TO TOP PERF.
	0:30 1:00	0.50	STG02	18		P		CASING BARRIERS, #1 PACKER, #2 LANDED W/ HANGER, #3 VALVES SHUT, #4 NIGHT CAP VALVES. TUBING BARRIERS, #1 SHUT MANUEL VALVE, # 2 SHUT AND LOCK HCR VALVE, # 3 FLOW CROSS VALVES SHUT AND NIGHT CAPS INSTALLED, #4 TOP HCR VALVE SHUT AND LOCKED, #5 NIGHT CAP INSTALLED ON TOP OF STACK.
5/7/2016	6:00 7:00	1.00	STG03	28		P		CT TGSM & JSA ( FRAC OPERATIONS )
	7:00 10:30	3.50	STG03	21		P		RIH W/ 2" WT BARS AND CCL, TAG @ 9,318' STAGE 3 PERFS COVERED RU HALIBURTON PUMP 7 BBLS, RE TAG @ 9,386'. POOH. RIH AND SHOOT THE INTERVALS OF STAGE 9,384' TO 9,336' 2 W/ 2 1/2" TAG-RTG GUN ( WITH TITAN'S HMX SDP GUNSLINGER 11 GM CHARGES ) 3 JSPF, AND 120° PHASING. 2900 PSI PRESSURE WHILE PERFORATING, LOST 150 PSI. ALL PERFORATIONS CORRELATED TO CUTTER RADIAL CEMENT BOND/GAMMA RAY/CCL/TEMP ( RUN #1 9/15/14 ) OVERALL FOOTAGE 14' NET FT, 42 INTERVALS.
	10:30 13:30	3.00	STG03	35		P		PRESSURE TEST LINES AND EQUIPMENT. SET POP OFFS. SIP @ 1885 PSI, BREAK DOWN STAGE 3 PERFS @ 12.6 BPM @ 3825 PSI. EST RATE TO 30.9 @ 3977 PSI. ISDP 2711, 5/ 2,552 10/ 2,550 15/ 2,545. TREAT STAGE 3 PERFS W/ 6,000 GAL 15% HCL W/ 44 BIO BALLS FOR DIVERSION IN 2 SEPERATE DROPS SPACED OUT. ISDP 2153 F.G .65 601 BBLS TO RECOVER. AVE HORSE POWER 2565. DURING 5 10 15 CASING STARTED GAINING PRESSURE. STARTED POPPING OFF.
	13:30 16:00	2.50	RDMO	02		P		DRAIN UP, EQUIPMENT. REMOVE LINES OFF WELL HEAD.
	16:00 16:00	0.00	FB	23		P		OPEN 2100 ON 12/64 TOT FLOW BACK
5/8/2016	6:00 6:30	0.50	FB	28		P		TGSM & JSA ( FLOW BACK PROCEDURES )
	6:30 6:30	0.00	FB	23		P		CURRENT PRESSURE 125 PSI 64/64 CHOKE 373 BBLS FLUID TO FLOW BACK TANK

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
5/9/2016	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 0 PSI 64/64 CHOKE 12 BBLs FLUID TO FLOW BACK TANK
5/10/2016	6:00 8:00	2.00	WOR	28		P		BI MONTHLY EP SAFETY MEETING
	8:00 8:30	0.50	WOR	28		P		TGSM & JSA ( TESTING PROCEDURES )
	8:30 14:30	6.00	WOR	16		P		WELL DEAD NOT FLOWING, ND GOAT HEAD AND TOP HCR. WELL NOT FLOWING ATTEMPT TO INSTALL 2 WAY CHECK TO TEST. COULD NOT GET TO SEAL, PUMP 30 BBLs DOWN TBG. RE ATTEMPT, SAME RESULTS, PUMP ADDITIONAL 20 BBLs, REBUILT 2 WAY, INSTALLED HELD. ND HCR AND FRAC VALVE.
	14:30 19:00	4.50	WOR	16		P		NU AND TEST BOP AND HYDRILL. RU LUBRICATOR RETRIEVE 2 WAY TBG BUILT UP TO 750 PSI. BLEED OFF GAS, PUMP 40 BBLs BRINE. INSTALL 1 WAY CHECK. RU WORK FLOOR AND TBG EQUIPMENT.
	19:00 22:00	3.00	WOR	18		P		RELEASE PACKER, RU LUBE, RETRIEVE 1 WAY CHECK, TBG BARRIERS, #1 TIW VALVE, #2 NIGHT CAP, CASING BARRIERS, #1 PIPE RAMS #2 HYDRILL. SHUT DOWN FOR DAY, CT
5/11/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( LAYING DOWN 4 1/2" )
	7:30 9:00	1.50	WOR	06		P		SIP @ 750, BWD CIRCULATE W/ KCL WOULD NOT KILL. CIRCULATE W/ BRINE WATER. MONITOR WELL BOTH SIDES DEAD.
	9:00 14:30	5.50	WOR	39		P		POOH W/ 200 JTS 4 1/2" AND PACKER BHA. ( STOP AND CIRCULATE AS NEEDED. L/D PACKER
	14:30 21:00	6.50	WLWORK	26		P		RU WIRELINE, RIH W/ 7" PLUG TO 9256', TAG. PUH SET @9255'. POOH W/ SETTING TOOL, RD WIRELINE. CHANGE OUT 7' AS-1 PKR, PLUG TEST BHA TO 7000 PSI - OK. BREAK OUT @ PROFILE NIPPLE, INSTALL 2 PIECE SV. TEST SV TO 7000 PSI - OK. CONT PU 15 JTS 4 1/2" TBG.
5/12/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( PU 4 1/2" TBG )
	7:30 14:30	7.00	WOR	24		P		CK PRESS, OPEN WELL. OIL IN TBG. PUMP DOWN CSG, PRESS UP TO 600 PSI. PRESS TEST SV TO 7000 PSI - OK. PU 49 JTS 4 1/2" TBG, FILL, TEST TO 7000 PSI - OK. TIH W/ 68 JTS 4 1/2" TBG EOT @4237'. FILL, TEST TO 7000 PSI - OK. TIH W/ 69 JTS 4 1/2" TBG EOT@6411'. MU HANGER, SET 7" AS-1 PKR @6404' W/25,000# COMP., LAND W/HANGER. PRESS UP CSG TO PKR TO 500 PSI, PRESS UP TBG TO 7000 PSI - OK
	14:30 17:30	3.00	WOR	18		P		RU WIRELINE, RIH W/ RETRIEVING TOOL TO SV, POOH W/ DART MANDREL, LD SAME. RIH W/ RETRIEVING TOOL TO SLEEVE, POOH W/ SAME. RD WIRE LINE, TEST TBG TO 7" PLUG @9255' @ 6200 PSI - LOST PRESS. TRY TO PRESS UP 2200 PSI MAX. RU HOT OILER TO TBG, PRESS UP TO 2400 PSI, INJ @1 BPM. BLEED OFF PRESS, REMOVE PUP JTS FROM HANGER.
	17:30 22:30	5.00	WOR	18		P		RU WIRELINE, RIH TO PLUG @9255' - MOVED DOWN HOLE 48'. POOH W/WIRELINE, HANG BACK LUB. INSTALL BACK PRESS VALVE. CASING BARRIERS #1 PACKER, # 2 HANGER. #3 VALVE SHUT, #5 NIGHT CAPS INSTALLED. 4 1/2" TBG BARRIERS. #1 BACK PRESSURE VALVE, #2 BLIND RAMS SHUT AND LOCKED. CREW TRAVEL
5/13/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( NU STACK, RU FRAC EQ., )
	7:30 15:00	7.50	MIRU	01		P		NU AND TEST STACK TO 7500 PSI, RU FRAC EQ., PRESSURE TEST
	15:00 17:00	2.00	STG04	18		P		SIP @ 940 PSI, EST INJ RATE OF 15 BPM @ 3600 PSI, PUMP 500 # SAND PLUG SPOT HEAD OF SAND PLUG @ 9303'. LET SIT FOR 15 MINUTES. ATTEMPT TO PRESSURE UP SLOWLY WALK RATE UP TO 15 BPM @ 4900 PSI.
	17:00 19:00	2.00	SL	32		P		RU WIRE LINE RIH AND TAG @ 9350'
	19:00 21:00	2.00	STG04	18		P		SPOT 1700# SAND PLUG TO TOP PERF. WAIT 1 HOUR

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	21:00 23:00	2.00	SL	32		P		RU WIRE LINE RIH AND TAG @ 9347'. CASING BARRIERS, #1 PACKER, #2 LANDED W/ HANGER, #3 VALVES SHUT, #4 NIGHT CAP VALVES. TUBING BARRIERS, #1 SHUT MANUEL VALVE, # 2 SHUT AND LOCK HCR VALVE, # 3 FLOW CROSS VALVES SHUT AND NIGHT CAPS INSTALLED, #4 TOP HCR VALVE SHUT AND LOCKED, #5 NIGHT CAP INSTALLED ON TOP OF STACK.
5/14/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( FRAC OPERATIONS )
	7:30 8:30	1.00	STG04	18		P		PRIME AND TEST EQUIPMENT, ATTEMPT TO ESTABLISH INJECTION RATE, PRESSURE UP TO 6000 BLED DOWN TO 5800 IN 15 MINUTE
	8:30 12:30	4.00	STG04	21		P		RIH AND SHOOT THE INTERVALS OF STAGE 4 9,177' TO 8,946' W/ 2 1/2" TAG-RTG GUN ( WITH TITAN'S HMX SDP GUNSLINGER 11 GM CHARGES ) 3 JSPF, AND 120° PHASING. 1800 PSI PRESSURE WHILE PERFORATING, LOST 400 PSI. ALL PERFORATIONS CORRELATED TO CUTTER RADIAL CEMENT BOND/GAMMA RAY/CCL/TEMP ( RUN #1 9/15/14 ) OVERALL FOOTAGE 15' NET FT, 45 INTERVALS. ( STAGE FOUR PERFORATIONS WERE CHANGED BY ROBERT FONDREN AND CONFIRMED BY TROY ANDERTON AND BERRY LLOYD. )
	12:30 14:30	2.00	STG04	35		P		SIP @ 630 PSIG, BREAK DOWN STAGE 4 PERFS 10 BPM @ 3,311 PSIG,PUMPED 11000 GAL 15% HCL, ESTABLISH INJECTION RATE @ 52 BPM @ 5,030 PSI. ISIP @ 2,192 F.G 68. 5 MIN 2,100. TREAT STAGE 4 PERFS W/ 6160# 100 MESH IN 1/2 PPG STAGE AND 115,040 # POWER PROP 30/50 PREMIUM WHITE IN .5,1,1.5,2,3 PPG FLUSH TO TOP PERF. FINAL ISIP @ 2,760 F.G .74, AVG RATE 56.2 BPM, MAX RATE 61.3 BPM, AVE PRES 4,175, MAX PRES 4,460. AVE HORSE POWER 5,751 SWI STAGE 4 WATER TO RECOVER 4,388.
	14:30 17:30	3.00	RDMO	02		P		RDMO HALLIBURTON
17:30 6:00	12.50	FB	23		P		OPEN 1800 PSI ON 12/64	
5/15/2016	6:00 6:30	0.50	FB	28		P		TGSM & JSA ( FLOW BACK )
	6:30 6:00	23.50	FB	23		P		CURRENT PRESSURE 600 PSI ON 12/64 CHOKE FLAIRING GAS 51 OIL 664 WATER
5/16/2016	6:00 6:30	0.50	FB	28		P		CT TGSM & JSA ( FLOW BACK OPERATIONS )
	6:30 6:00	23.50	FB	23		P		CURRENT PRESSURE 400 PSI ON 12/64 CHOKE FLAIRING GAS 181 OIL 488 WATER
5/17/2016	6:00 6:30	0.50	FB	28		P		CT TGSM & JSA ( FLOW BACK OPERATIONS )
	6:30 6:00	23.50	FB	23		P		CURRENT PRESSURE 200 PSI ON 12/64 CHOKE FLAIRING GAS 219 OIL 299 WATER
5/18/2016	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 OIL 254 WATER 288
5/19/2016	6:00 7:30	1.50	WOR	28		P		TGSM & JSA ( NU AND TESTING PROCEDURES )
	7:30 10:30	3.00	WOR	06		P		PUMP 30 BBLs DOWN TBG, FLUSH FLOWLINE, FLOWBACK LINES. ND GOAT HEAD, HCR VALVE, CROSS. LUB IN BACK PRESS VALVE, CONT ND 2 HCR'S.
	10:30 15:00	4.50	WOR	16		P		NU 5K BOP, HYDRIL, TEST SAME. RU FLOOR,TBG WORKS. LUB IN 1 WAY BACK PRESS VALVE. PUMP 40 BBLs DOWN TBG, MU 4 1/2" SUBS IN HANGER
	15:00 18:00	3.00	WOR	06		P		RELEASE PKR @6404'. PUMP 30 BBLs DOWN TBG. REMOVE BACK PRESS VALVE. RU TBG UP TO FLOW TO BATTERY OVERNIGHT. RU FRANKS TONGS, SPOT EQUIP TO LD 4 1/2" TBG

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
5/20/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( LAYING DOWN 4 1/2" )
	7:30 14:30	7.00	WOR	24		P		FINISH CIRC W/ HOT OILER, OPEN WELL. MU PUP JTS, POOH, LD 2 PUP JTS, HANGER W/ PUP JTS. 7:30-2:30PM CONT LD 203 JTS 4 1/2" TBG, LOAD OUT SAME, PIPE RACKS. LD X-OVER, PROFILE NIPPLE, PUP JT, X-OVER, BLAST SUB, 7"AS-1 PKR.
	14:30 15:30	1.00	WOR	18		P		X-OVER TO 2 7/8" TBG EQUIP, CHANGE HANDLING EQUIPMENT TO 2 7/8".
	15:30 19:30	4.00	WOR	39		P		PU, TIH W/ 6" ROCK BIT(NEW), BIT SUB, PSN, 6' PUP JT, 272 JTS 2 7/8" N-80 TBG. INSTALL WASHINGTON RUBBER. EOT @8893'. SWI BARRIER 1 10# BRINE, BARRIER 2 TIW VALVE, # 3 NIGHT CAP. CASING LEFT OPEN TO FACILITIES.
5/21/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( POWER SWIVEL OPERATIONS )
	7:30 20:30	13.00	WOR	40		P		TOP KILL TBG RIH TAG @ 9122', CIRCULATE CLEAN, WASH SAND TO PLUG AT 9313' DRILL UP CBP CONTINUE CLEANING SAND TO 9472'. CIRCULATE CLEAN PULL ABOVE PERFS TO 8893'. CASING BARRIERS, 1 PIPE RAMS, 2 HYDRILL, 3 VALVE SHUT WITH BULL PLUG, OFF SIDE SENT TO FACILITIES AND TURNED TO FLOW BACK CREW. TUBING BARRIER 1 TIW VALVE 2 NIGHT CAP. CREW TRAVEL.
5/22/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( POWER SWIVEL OPERATIONS )
	7:30 13:00	5.50	WOR	40		P		OPEN WELL, BLEED OFF GAS. PUMP 15 BBLS BRINE DOWN TBG. TIH W/ 16 JTS, TAG @9424'( 50' OF NEW FILL). LD 2 JTS, CLEAN OUT W/ 2 JTS, FIGHT GAS. CIRC OUT GAS, PUMP 15 BBLS BRINE DOWN TBG, CONT CLEAN OUT TO LINEAR TOP @9739'. CIRC WELL CLEAN.
	13:00 16:30	3.50	WOR	39		P		RD POWER SWIVEL, LD 8 JTS , TOO H W/ 138 JTS, CIRC WELL W/ 175 BBLS BRINE. CONT TOO H W/ 157 JTS 2 7/8" TBG, LD 6' PUP JT,PSN,BIT SUB, 6" BIT.
	16:30 20:30	4.00	WOR	39		P		X-OVER TO 2 3/8" TBG EQUIP, MU 4 1/8" MILL, PSN, PUP JT. TIH W/ 16 JTS 2 3/8" TBG, X-OVER TO 2 7/8" TBG, TIH W/253 JTS 2 7/8" TBG. EOT@ 8829'. CASING BARRIERS, 1 PIPE RAMS, 2 HYDRILL, 3 VALVE SHUT WITH BULL PLUG, OFF SIDE SENT TO FACILITIES AND TURNED TO FLOW BACK CREW. TUBING BARRIER 1 TIW VALVE 2 NIGHT CAP. CREW TRAVEL. FLOW WELL OVER WEEK END TO TANK BATTERY.
5/23/2016	6:00 6:00	24.00	WOR	18		P		SDFWE
5/24/2016	6:30 8:00	1.50	WOR	28		P		CT TGSM & JSA ( CLEANING OUT PROCEDURES )
	8:00 15:30	7.50	WOR	40		P		OPEN WELL. BLEED OFF GAS, PUMP 15 BBLS BRINE DOWN TBG. TIH W/ 13 JTS +6', TAG @9746'- TBG TALLEY( 13' LONG TO WIRELINE). LD 1 JT, RU POWERSWIVEL, CLEAN OUT TO 9982' ((TBG TALLEY) HAD TO TOP KILL TBG AFTER EVERY CONNECTION). CIRC WELL CLEAN.
	15:30 18:00	2.50	WOR	39		P		PUMP 20 BBLS BRINE DOWN TBG , RACK OUT POWER SWIVEL. LD 29 JTS 2 7/8" TBG, TOO H W/ 104 JTS 2 7/8" TBG. EOT@5995'. CASING BARRIERS, 1 PIPE RAMS, 2 HYDRILL, 3 VALVE SHUT WITH BULL PLUG, OFF SIDE SENT TO FACILITIES AND TURNED TO FLOW BACK CREW. TUBING BARRIER 1 TIW VALVE 2 NIGHT CAP. CREW TRAVEL. FLOW WELL OVER NIGHT TO TANK BATTERY.
5/25/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( TRIPPING TBG )
	7:30 11:00	3.50	WOR	39		P		CIRC WELL CLEAN, FILL W/ BRINE WATER. TOO H W/ 168 JTS 2 7/8" TBG, LD X-OVER. X-OVER TO 2 3/8" TBG EQUIP, LD 16 JTS 2 3/8" TBG, PUP JT, PSN, 4 1/8" MILL.

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	11:00 13:00	2.00	INARTLT	39		P		X-OVER TO 2 7/8" TBG EQUIP, PU, TIH W/ 5 3/4" NO/GO, 3 JTS 2 7/8" L-80 TBG, 5 1/2" PBGA, 2- 2' PUP JTS, MECH SN, TBG PUMP CAVITY, 4' PUP JT, 4 JTS 2 7/8" L-80 TBG, 7" TAC, 265 JTS 2 7/8" L-80 TBG. PRE SET TAC, RELEASE. LAND TBG W/ DONUT HANGER, RD FLOOR, TBG WORKS. ND WASHINGTON HEAD, ANNULLAR, 5K BOP, 10K SPOOL. SET 7" TAC W/18,000# TENSION@ 8669', MECH SN@8845', EOT@ 8980'. LAND TBG W/ B- FLANGE, INSTALL CAP STRING. MU WELLHEAD, RU FLOWLINE. CHANGE OUT CSG VALVE FLANGES, RACK OUT PUMP EQUIP. LOAD OUT, MOVE TO3-18C4.
5/26/2016	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA ( CO ROD OPERATIONS )
	7:30 9:30	2.00	WOR	06		P		FLUSH TBG W/ CORROSION INH, DROP S/V AND TEST TO 1000 PSI. MIRU CO ROD
	9:30 16:30	7.00	INARTLT	03		P		PU & RIH W/ 2 1/4" PLUNGER, 40' P ROD, STAB SUB, ON/OFF TOOL, 1362' #6, 6100' #5 ( LAY DOWN 3000' ), 2900 #6, 1400 # 7 SPACE OUT W/ 1310' # 8 8',6',4',2' X 1" SUBS AND 1 1/2 X 40' P ROD, L/S TO 1000 PSI, RD SLIDE UNIT, NO TAG, TOTP