

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER Flying Dutchman 3-21C4								
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT ALTAMONT								
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME								
6. NAME OF OPERATOR EP ENERGY E&P COMPANY, L.P.						7. OPERATOR PHONE 713 997-5038								
8. ADDRESS OF OPERATOR 1001 Louisiana, Houston, TX, 77002						9. OPERATOR E-MAIL maria.gomez@epenergy.com								
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) Fee			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>								
13. NAME OF SURFACE OWNER (if box 12 = 'fee') Stephen Gawarecki						14. SURFACE OWNER PHONE (if box 12 = 'fee') 601-896-1430								
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') 913 Kent Dr, Clinton, MS 39056						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')								
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>								
20. LOCATION OF WELL		FOOTAGES		QTR-QTR		SECTION		TOWNSHIP		RANGE		MERIDIAN		
LOCATION AT SURFACE		1308 FSL 1048 FEL		SESE		21		3.0 S		4.0 W		U		
Top of Uppermost Producing Zone		1308 FSL 1048 FEL		SESE		21		3.0 S		4.0 W		U		
At Total Depth		1308 FSL 1048 FEL		SESE		21		3.0 S		4.0 W		U		
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 1048			23. NUMBER OF ACRES IN DRILLING UNIT 640								
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 3000			26. PROPOSED DEPTH MD: 11600 TVD: 11600								
27. ELEVATION - GROUND LEVEL 5861			28. BOND NUMBER 400JU0708			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Duchesne City								
<b>Hole, Casing, and Cement Information</b>														
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight				
Cond	20	13.375	0 - 600	54.5	J-55 ST&C	8.8	Class G	1292	1.15	15.8				
Surf	12.25	9.625	0 - 2500	40.0	N-80 LT&C	9.3	Unknown	312	3.16	11.0				
							Unknown	191	1.33	14.3				
I1	8.75	7	0 - 8600	29.0	HCP-110 LT&C	10.0	Unknown	251	3.67	11.0				
							Unknown	91	1.91	12.5				
L1	6.125	5	8400 - 11600	18.0	P-110 ST-L	11.5	Unknown	190	1.47	14.2				
<b>ATTACHMENTS</b>														
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES														
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN								
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER								
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP								
NAME Maria S. Gomez				TITLE Principal Regulatory Analyst				PHONE 713 997-5038						
SIGNATURE				DATE 09/05/2013				EMAIL maria.gomez@epenergy.com						
API NUMBER ASSIGNED 43013524600000				APPROVAL   Permit Manager										

**Flying Dutchman 3-21C4  
Sec. 21, T3S, R4W  
DUCHESNE COUNTY, UT**

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

**DRILLING PROGRAM**

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

<u>Formation</u>	<u>Depth</u>
Green River (GRRV)	3,658' TVD
Green River (GRTN1)	4,628' TVD
Mahogany Bench	6,298' TVD
L. Green River	6,798' TVD
Wasatch	8,658' TVD
T.D. (Permit)	11,600' TVD

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River (GRRV)	3,658' MD / TVD
	Green River (GRTN1)	4,628' MD / TVD
	Mahogany Bench	6,298' MD / TVD
Oil	L. Green River	6,798' MD / TVD
Oil	Wasatch	8,658' MD / TVD

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

A 4.5" by 20.0" rotating head on structural pipe from surface to 600' MD/TVD. A 4.5" by 13-3/8" Smith Rotating Head from 600' MD/TVD to 2,500' MD/TVD on Conductor. A 5M BOP stack, 5M kill lines and choke manifold used from 2,500' MD/TVD to 8,600' MD/TVD. A 10M BOE w/ rotating head, 5M annular, blind rams & mud cross from 8,600' MD/TVD to TD (11,600' 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 3-½" pipe rams, blind rams, mud cross and rotating head from intermediate shoe to TD. The BOPE will be hydraulically operated.

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

**Statement on Accumulator System and Location of Hydraulic Controls:**

Precision Rig # 404 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 – 2,500' to TD (11,600' 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	8.8 – 9.3
Intermediate	WBM	9.3 – 10.0
Production	WBM	10.0 – 11.5

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

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program:**

Logs:

Mud Log: 2,500' MD/TVD – TD (11,600' 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 11,600' TVD equals approximately 6,937 psi. This is calculated based on a 0.598 psi/ft gradient (11.5 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 4,385 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 8,600' TVD = 6,880 psi

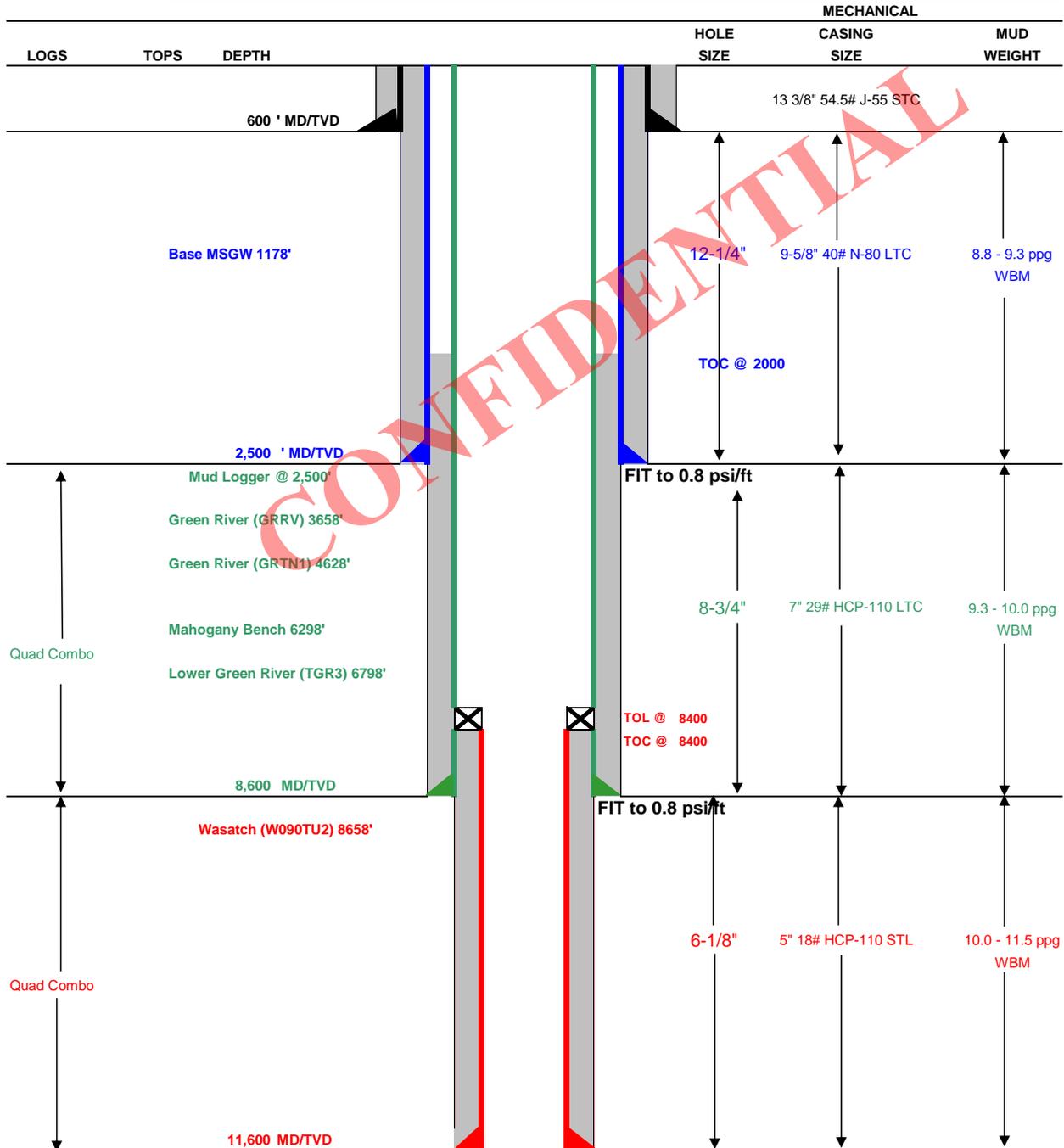
BOPE and casing design will be based on the lesser of the two MASPs which is 4,385 psi.

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



Drilling Schematic

<b>Company Name:</b> EP ENERGY	<b>Date:</b> August 30, 2013
<b>Well Name:</b> Flying Dutchman 3-21C4	<b>TD:</b> 11,600
<b>Field, County, State:</b> Altamont, Duchesne, Utah	<b>AFE #:</b> TBD
<b>Surface Location:</b> Sec 21 T3S R4W 1308' FSL 1048' FEL	<b>BHL:</b> Straight Hole
<b>Objective Zone(s):</b> Green River, Wasatch	<b>Elevation:</b> 5861.3
<b>Rig:</b> Precision 404	<b>Spud (est.):</b> TBD
<b>BOPE Info:</b> 4.5 x 13 3/8 rotating head from 600' to 2,500' 11 5M BOP stack and 5M kill lines and choke manifold used from 2,500' to 8,600' 11 10M BOE w/rotating head, 5M annular, 3.5 rams, blind rams & mud cross from 8,600' to TD	



**DRILLING PROGRAM**

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	600	54.5	J-55	STC	2,740	1,130	514
SURFACE	9-5/8"	0	2500	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0	8600	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	5'	8400	11600	18.00	HCP-110	STL	13,950	14,360	495

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		600	Class G + 3% CACL2	1292	100%	15.8 ppg	1.15
SURFACE	Lead	2,000	EXTENDACEM (TM) SYSTEM: 5 lbm/sk Silicalite Compacted + 0.25 lbm/sk Kwik Seal + 0.125 lbm/sk Poly-E-Flake + 2% Bentonite	312	75%	11.0 ppg	3.16
	Tail	500	HALCEM (TM) SYSTEM: 3 lbm/sk Silicalite Compacted + 1% Salt + 0.3% Econolite + 0.25 lbm/sk Poly-E-Flake + 0.25 lbm/sk Kwik Seal + 0.5% HR-5	191	50%	14.3 ppg	1.33
INTERMEDIATE	Lead	5,600	EXTENDACEM (TM) SYSTEM: 6% Cal-Seal 60 + 5 lbm/sk Silicalite Compacted + 2% Econolite + 0.5% D-AIR 5000 + 5 lbm/sk Kol-Seal + 0.25 lbm/sk Poly-E-Flake + 1 lbm/sk Granulite TR 1/4 + 2% Microbore M + 10% Fibrepro 922	251	10%	11.0 ppg	3.67
	Tail	1,000	EXPANDACEM (TM) SYSTEM: 0.2% Econolite + 0.3% Versaset + 0.9% HR-5 + 0.3% Super CBL + 0.2% Halad(R)-322 + 0.125 lbm/sk Poly-E-Flake	91	10%	12.5 ppg	1.91
PRODUCTION LINER		3,200	EXTENDACEM (TM) 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	190	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 6,700'.
LINER	Float shoe, 1 joint, float collar. Thread lock all FE. Maker joints every 1000'.

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

MANAGER: Tommy Gaydos

**EP ENERGY E&P COMPANY, L.P.**  
**FLYING DUTCHMAN 3-21C4**  
**SECTION 21, T3S, R4W, U.S.B.&M.**

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

TURN RIGHT AND TRAVEL EASTERLY ON A COUNTY B ROAD 2.63 MILES TO AN INTERSECTION;

TURN RIGHT AND TRAVEL SOUTHERLY ON AN EXISTING 0.73 MILES TO THE BEGINNING OF THE ACCESS ROAD;

TURN LEFT AND FOLLOW ROAD FLAGS EASTERLY 0.27 MILES TO THE PROPOSED LOCATION;

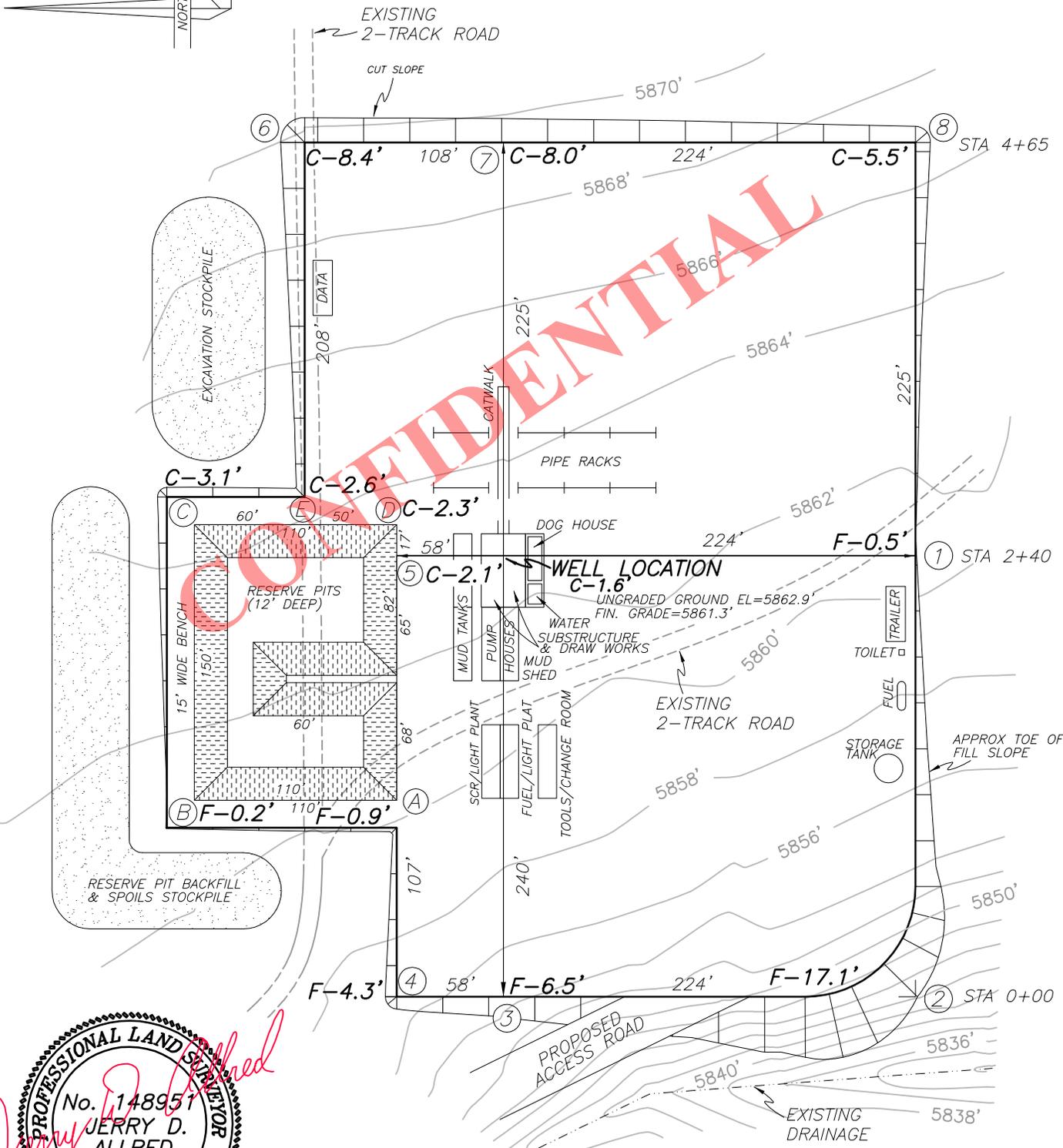
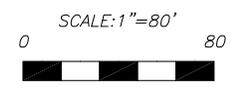
TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 7.17 MILES.

**CONFIDENTIAL**

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

FIGURE #1

LOCATION LAYOUT FOR  
FLYING DUTCHMAN 3-21C4  
SECTION 21, T3S, R4W, U.S.B.&M.  
1308' FSL, 1048' FEL



**CONFIDENTIAL**

*Jerry D. Allred*  
PROFESSIONAL LAND SURVEYOR  
No. 148951  
JERRY D. ALLRED  
31 JUL '13  
STATE OF UTAH

31 JUL 2013 01-128-427

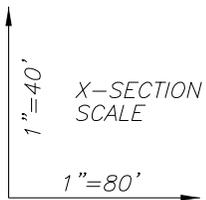
JERRY D. ALLRED & ASSOCIATES  
SURVEYING CONSULTANTS  
1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESNE, UTAH 84021  
(435) 738-5352

RECEIVED: September 05, 2013

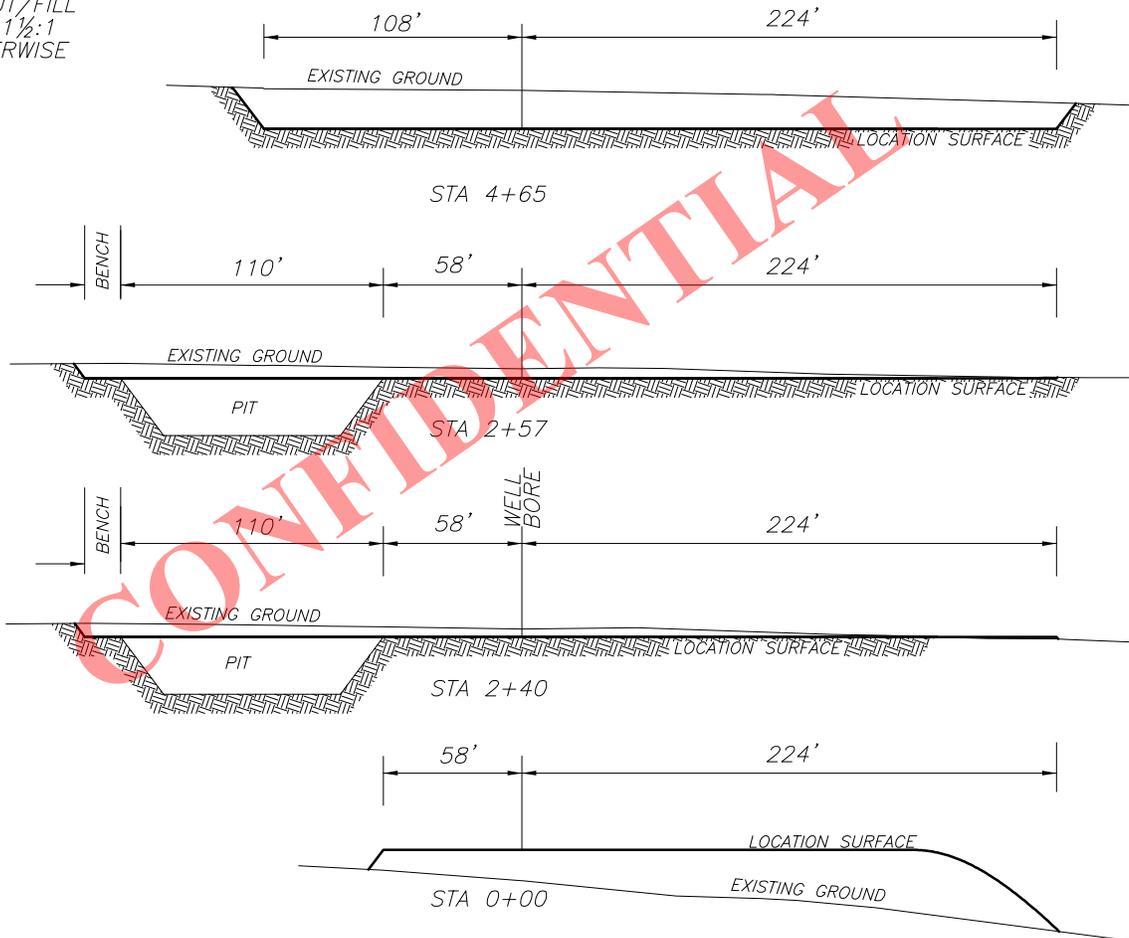
# EP ENERGY E&P COMPANY, L.P.

FIGURE #2

LOCATION LAYOUT FOR  
 FLYING DUTCHMAN 3-21C4  
 SECTION 21, T3S, R4W, U.S.B.&M.  
 1308' FSL, 1048' FEL



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



APPROXIMATE YARDAGES

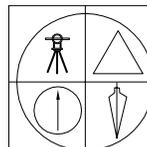
TOTAL CUT (INCLUDING PIT) = 19,115 CU. YDS.

- PIT CUT = 4955 CU. YDS.
- TOPSOIL STRIPPING: (6") = 3310 CU. YDS.
- REMAINING LOCATION CUT = 10850 CU. YDS.

TOTAL FILL = 10,850 CU. YDS.

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

ACCESS ROAD GRAVEL=381 CU. YDS.



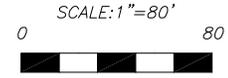
JERRY D. ALLRED & ASSOCIATES  
 SURVEYING CONSULTANTS

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

FIGURE #3

LOCATION LAYOUT FOR  
FLYING DUTCHMAN 3-21C4  
SECTION 21, T3S, R4W, U.S.B.&M.  
1308' FSL, 1048' FEL

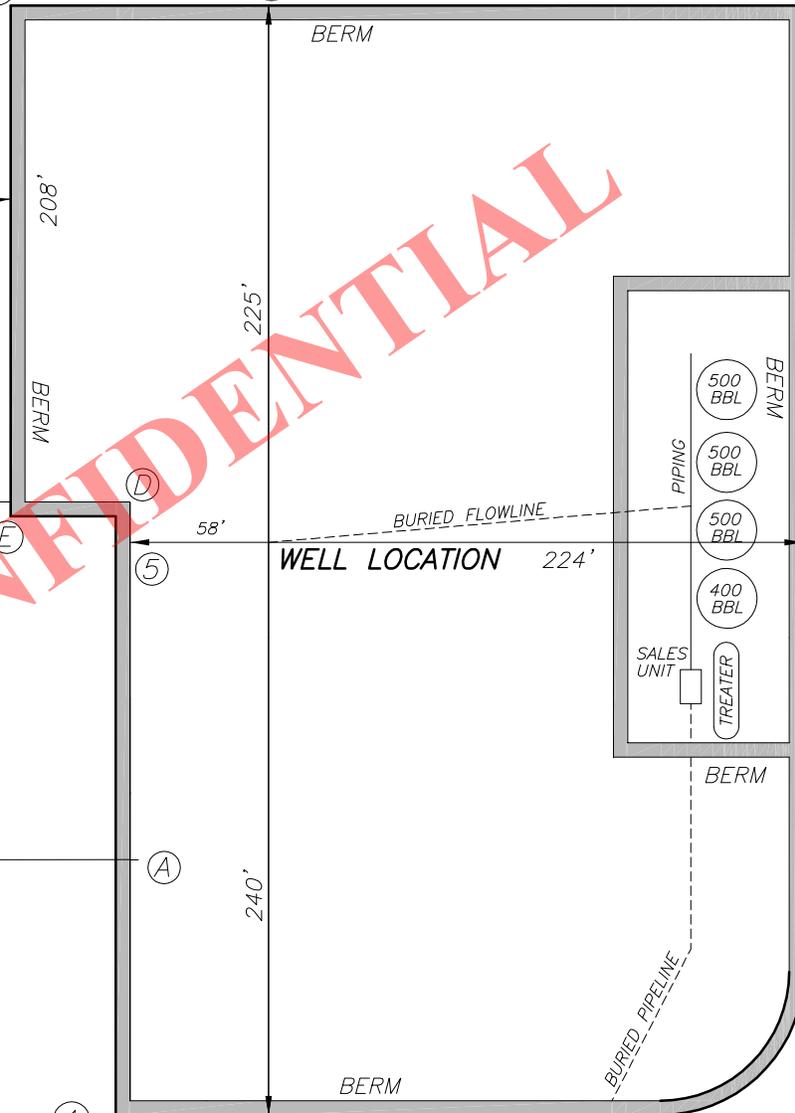
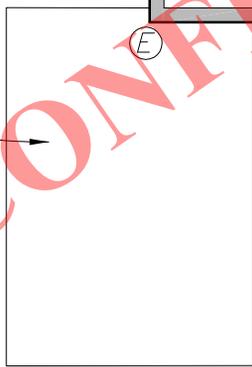


WELL PAD AREA  
BERMED AND USED  
FOR PRODUCTION

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

PIT AREA REGRADED  
BACK TO SLOPE FOR  
INTERIM RECLAMATION

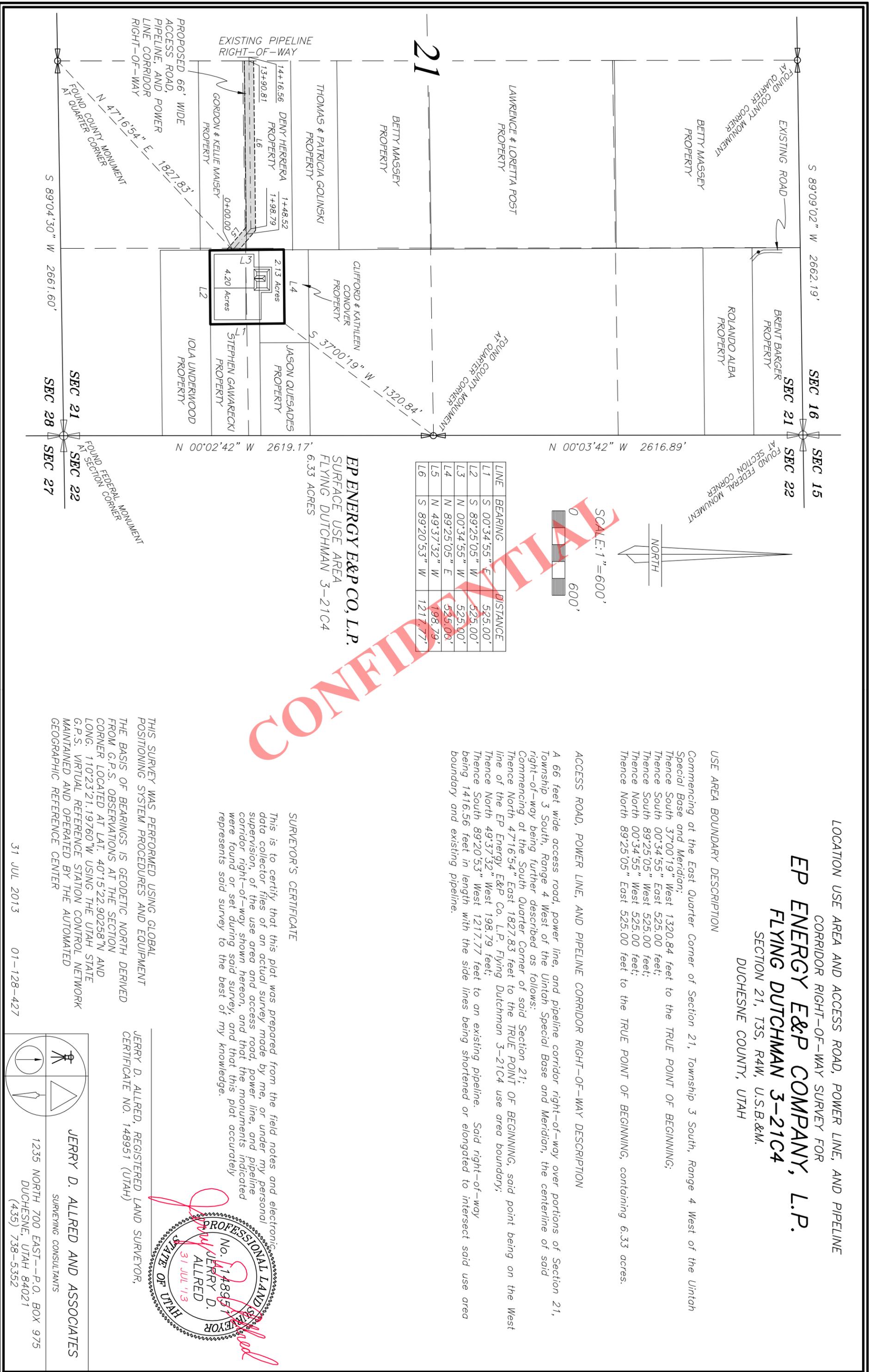
**CONFIDENTIAL**



PROPOSED  
ACCESS ROAD

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

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LINE	BEARING	DISTANCE
L1	S 00°34'55" E	525.00'
L2	S 89°25'05" W	525.00'
L3	N 00°34'55" W	525.00'
L4	N 89°25'05" E	525.00'
L5	N 49°37'32" W	198.79'
L6	S 89°20'53" W	1217.77'

**EP ENERGY E&P CO, L.P.**  
 SURFACE USE AREA  
 FLYING DUTCHMAN 3-21C4  
 6.33 ACRES

LOCATION USE AREA AND ACCESS ROAD, POWER LINE, AND PIPELINE  
**EP ENERGY E&P COMPANY, L.P.**  
 FLYING DUTCHMAN 3-21C4  
 SECTION 21, T3S, R4W, U.S.B.&M.  
 DUCHESNE COUNTY, UTAH

USE AREA BOUNDARY DESCRIPTION  
 Commencing at the East Quarter Corner of Section 21, Township 3 South, Range 4 West of the Uintah Special Base and Meridian:  
 Thence South 37°00'19" West 1320.84 feet to the TRUE POINT OF BEGINNING;  
 Thence South 00°34'55" East 525.00 feet;  
 Thence South 89°25'05" West 525.00 feet;  
 Thence North 00°34'55" West 525.00 feet;  
 Thence North 89°25'05" East 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 21, Township 3 South, Range 4 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows:  
 Commencing at the South Quarter Corner of said Section 21;  
 Thence North 47°16'54" East 1827.83 feet to the TRUE POINT OF BEGINNING, said point being on the West line of the EP Energy E&P Co. L.P. Flying Dutchman 3-21C4 use area boundary;  
 Thence North 49°37'32" West 198.79 feet;  
 Thence South 89°20'53" West 1217.77 feet to an existing pipeline. Said right-of-way being 1416.56 feet in length with the side lines being shortened or elongated to intersect said use area boundary and existing pipeline.

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)

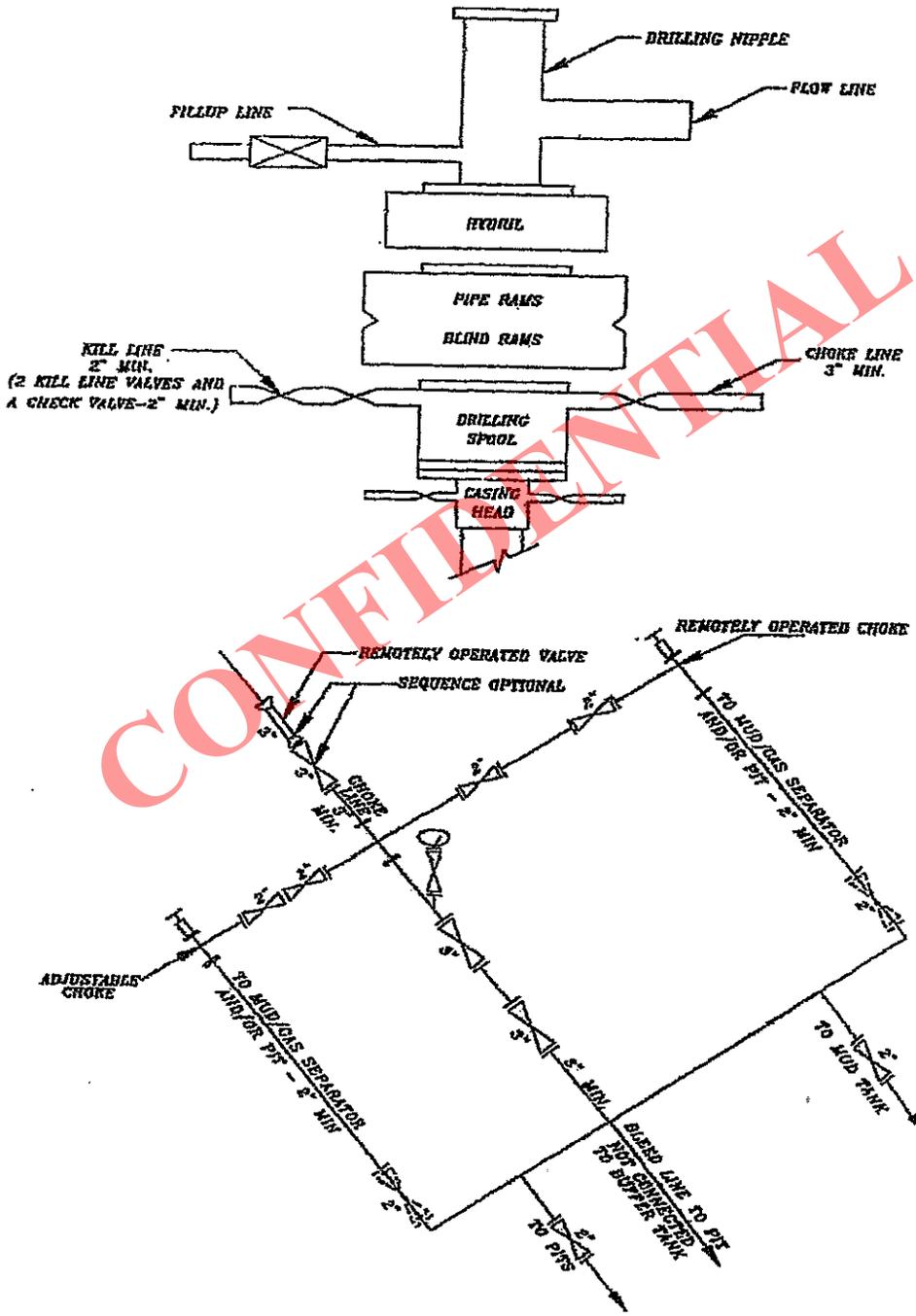
THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT  
 THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE SECTION CORNER LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL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

31 JUL 2013 01-128-427

JERRY D. ALLRED AND ASSOCIATES  
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# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



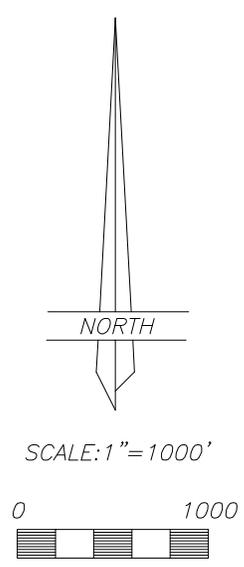
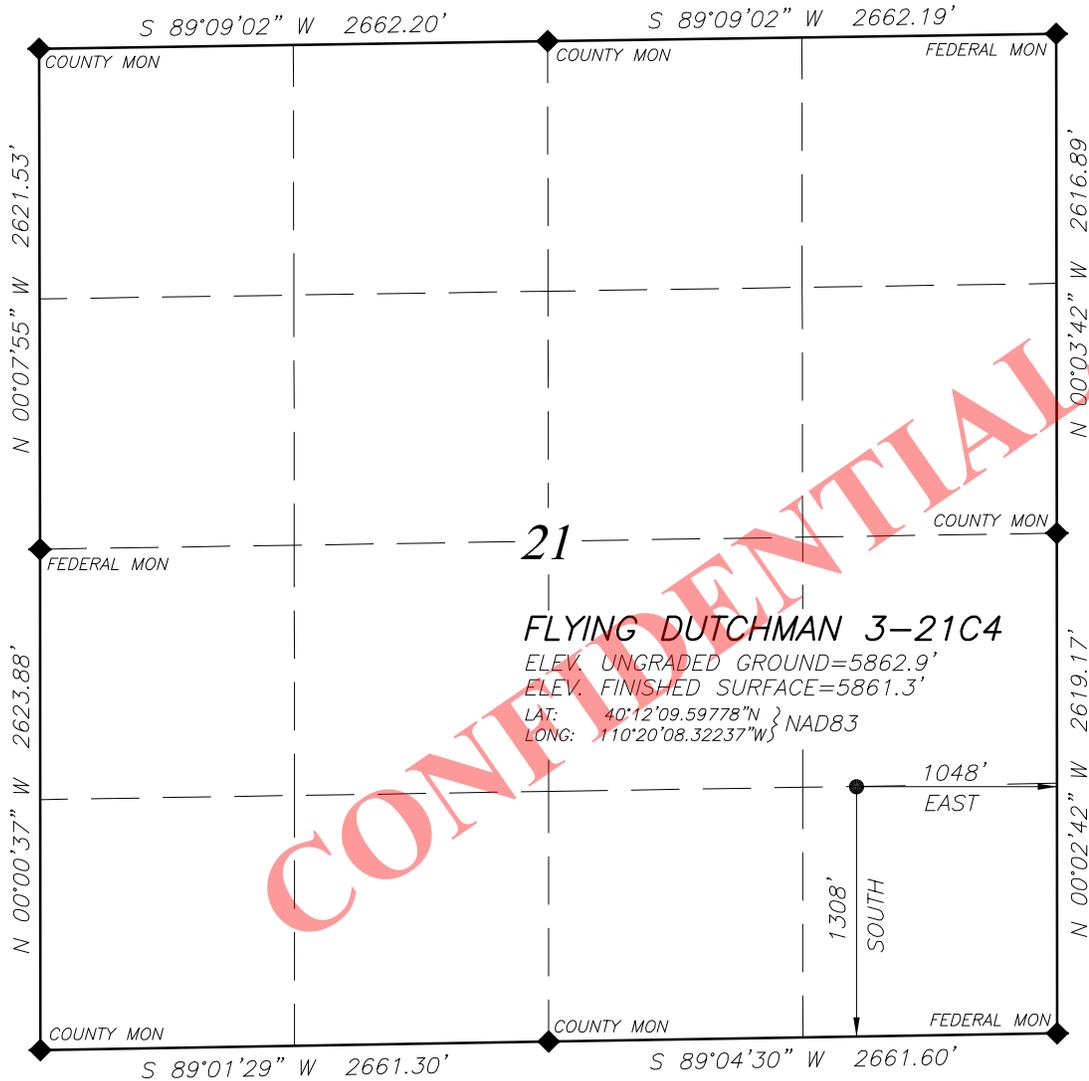


# EP ENERGY E&P COMPANY, L.P.

## WELL LOCATION

### FLYING DUTCHMAN 3-21C4

LOCATED IN THE SE¼ OF THE SE¼ OF SECTION 21, T3S, R4W, U.S.B.&M. DUCHESNE COUNTY, UTAH



**FLYING DUTCHMAN 3-21C4**  
 ELEV. UNGRADED GROUND=5862.9'  
 ELEV. FINISHED SURFACE=5861.3'  
 LAT: 40°12'09.59778"N } NAD83  
 LONG: 110°20'08.32237"W }

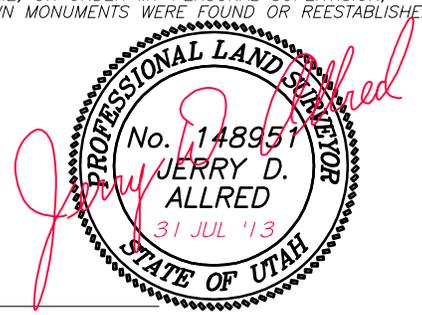
NOTE:  
 NAD27 VALUES FOR  
 WELL POSITION:  
 LAT:40.202708456° N  
 LONG:110.334934606° W

#### SURVEYOR'S CERTIFICATE

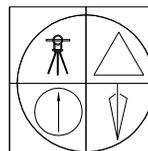
I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM THE FIELD NOTES AND ELECTRONIC DATA COLLECTOR FILES OF AN ACTUAL SURVEY PERFORMED BY ME, OR UNDER MY PERSONAL SUPERVISION, DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR REESTABLISHED.

#### 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)

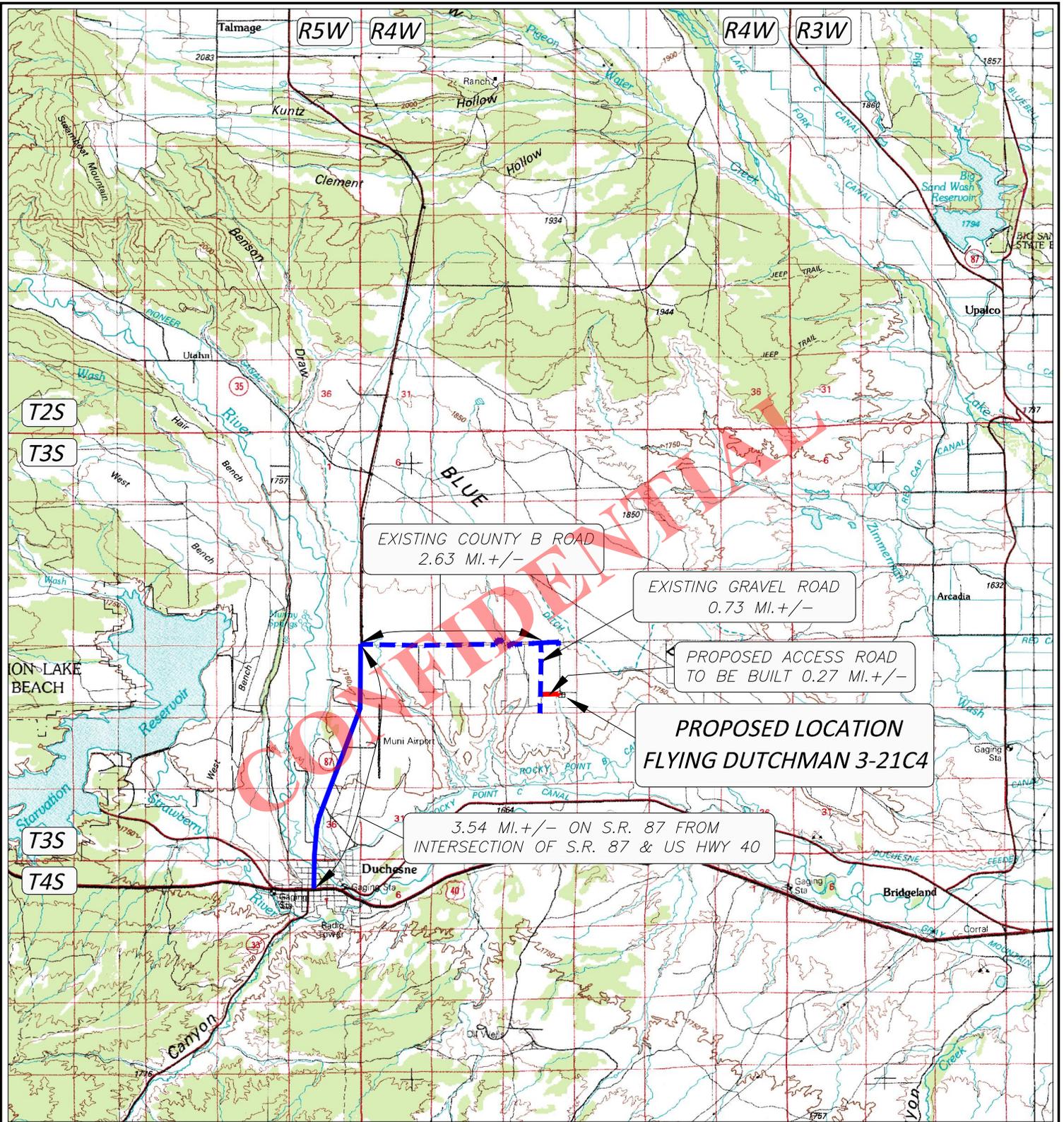


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31 JUL 2013 01-128-427

RECEIVED: September 05, 2013



EXISTING COUNTY B ROAD  
2.63 MI. +/-

EXISTING GRAVEL ROAD  
0.73 MI. +/-

PROPOSED ACCESS ROAD  
TO BE BUILT 0.27 MI. +/-

**PROPOSED LOCATION  
FLYING DUTCHMAN 3-21C4**

3.54 MI. +/- ON S.R. 87 FROM  
INTERSECTION OF S.R. 87 & US HWY 40

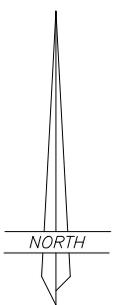
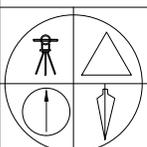
**LEGEND:**

PROPOSED WELL LOCATION

01-128-427

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

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



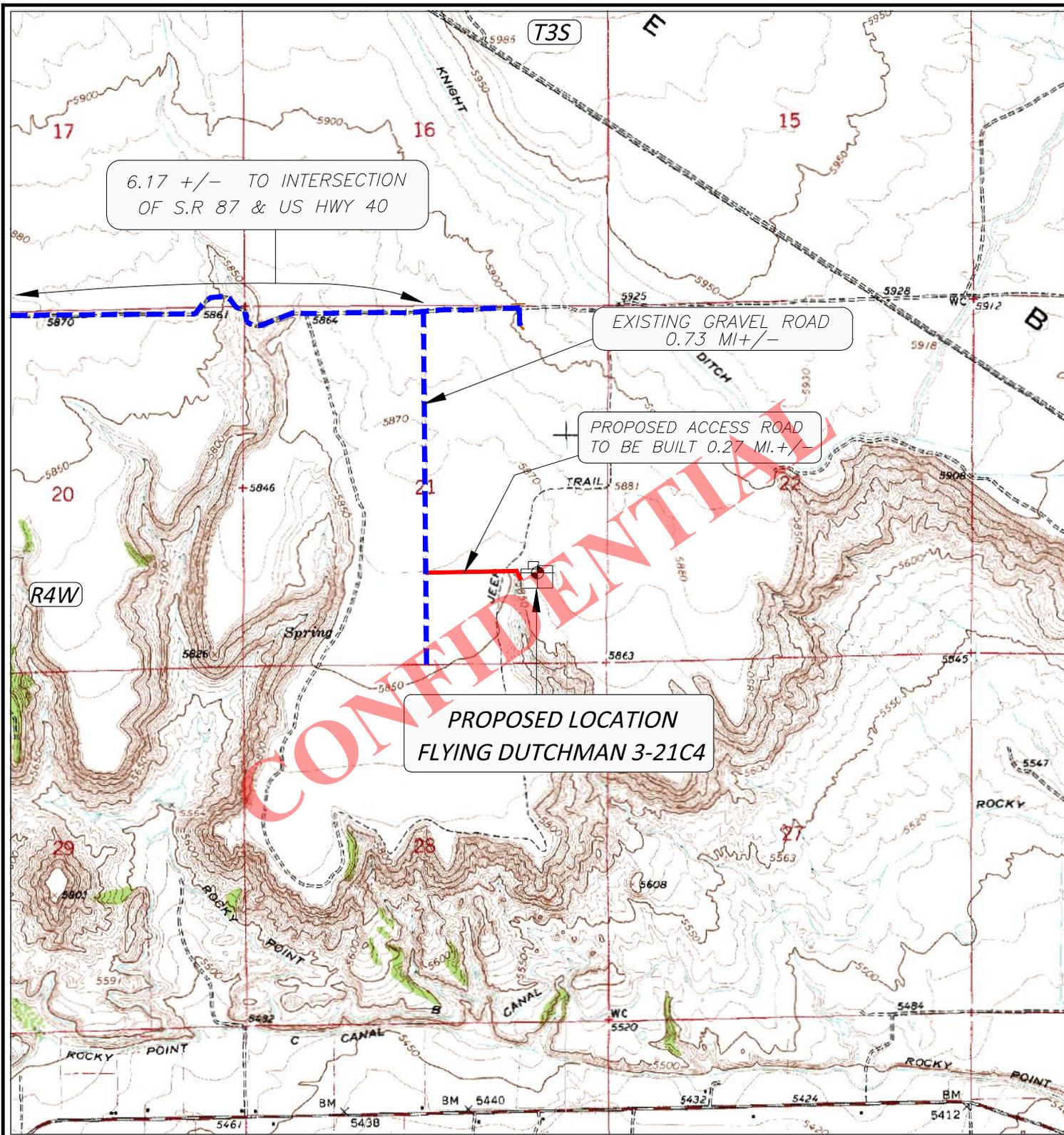
**EP ENERGY E&P COMPANY, L.P.**

FLYING DUTCHMAN 3-21C4  
SECTION 21, T3S, R4W, U.S.B.&M.

1308' FSL 1048' FEL

**TOPOGRAPHIC MAP "A"**

SCALE; 1"=10,000'  
31 JUL 2013



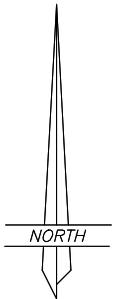
**LEGEND:**

-  **PROPOSED WELL LOCATION**
-  **PROPOSED ACCESS ROAD**
-  **EXISTING GRAVEL ROAD**
-  **EXISTING DIRT ROAD**

01-128-427

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

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



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

FLYING DUTCHMAN 3-21C4  
 SECTION 21, T3S, R4W, U.S.B.&M.

1308' FSL 1048' FEL

**TOPOGRAPHIC MAP "B"**

SCALE: 1"=2000'  
 31 JUL 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 Flying Dutchman 3-21C4 well (the "Well") to be located in the SE/4SE/4 of Section 21, Township 3 South, Range 4 West, USM, Duchesne County, Utah (the "Drillsite Location"). There are two surface owners for the Drillsite Location, collectively referred to herein as "Surface Owners." The surface owner of the South part of the Drillsite Location is Stephen Gawarecki, whose address is 913 Kent Dr, Clinton, MS 39056 and telephone number is 601-896-1430. The surface owners for the north part of the location are Clifford & Kathleen Conover, their address is PO Box 1092, Roosevelt, UT 84066 and telephone number is 435-722-1408.
3. EP Energy and the Surface Owners have entered into two Damage Settlement and Release Agreements dated August 19, 2013 and August 26, 2013, to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of operations associated with the drilling of the Well.

FURTHER AFFIANT SAYETH NOT.

*Jacquelyn L. Lynch*  
 \_\_\_\_\_  
 Jacquelyn L. Lynch

**ACKNOWLEDGMENT**

STATE OF TEXAS                   §  
   §  
 CITY AND COUNTY OF HARRIS   §

Before me, a Notary Public, in and for this state, on this 29th day of August, 2013, personally appeared Jacquelyn L. Lynch, to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that she executed the same as her own free and voluntary act and deed for the uses and purposes therein set forth.

*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 .27 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 .27 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:**

Stephen Gawarecki  
913 Kent Dr.  
Clinton, MS 39056  
601-896-1430

Clifford & Kathleen Conover  
P. O. Box 1092  
Roosevelt, UT 84066  
435-722-1408

**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:**

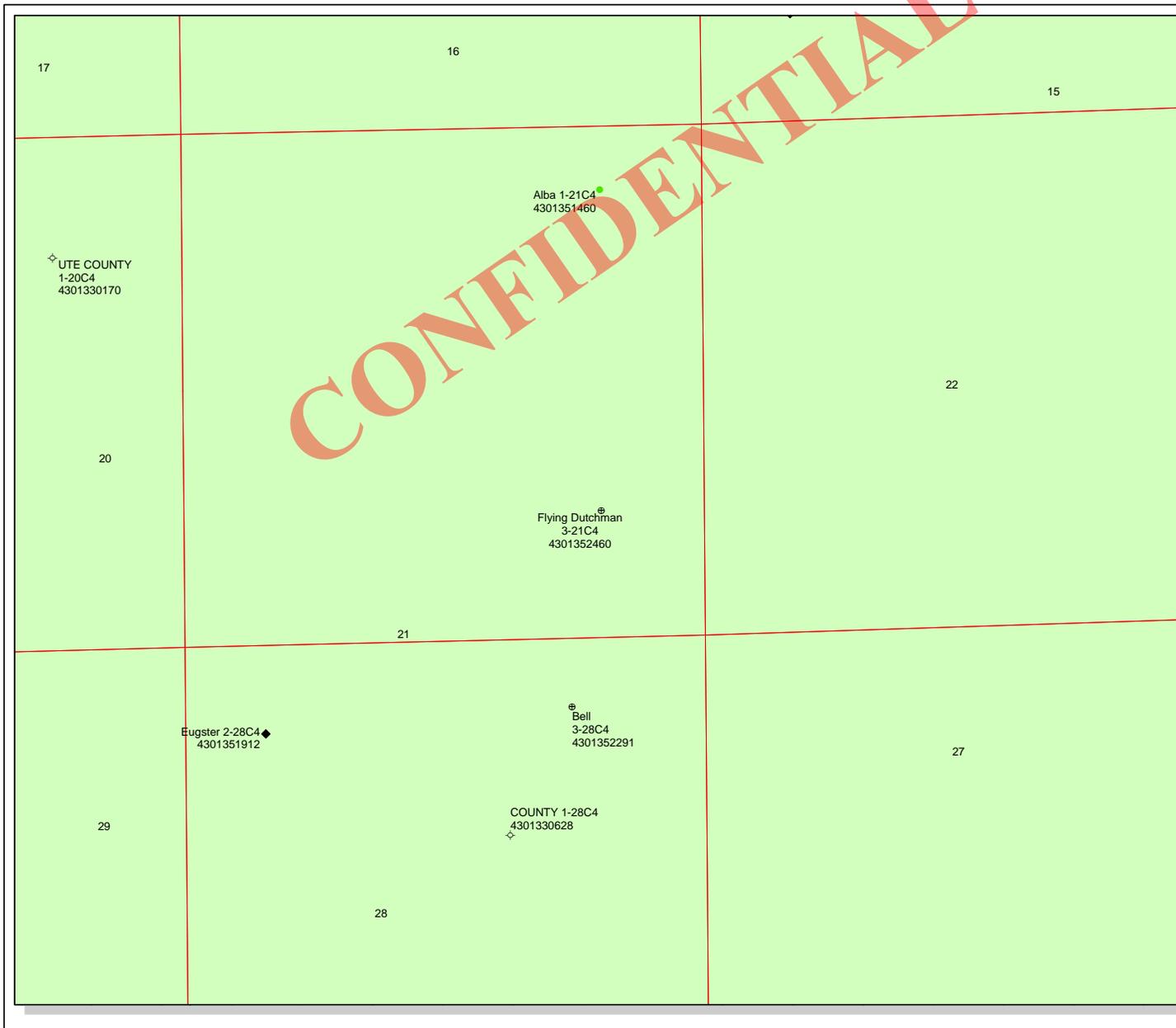
EP Energy E&P Company, L.P.  
Wayne Garner  
PO Box 410  
Altamont, Utah 84001  
435-454-3394 – Office  
435-823-1490 – Cell

**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**

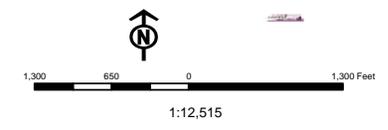
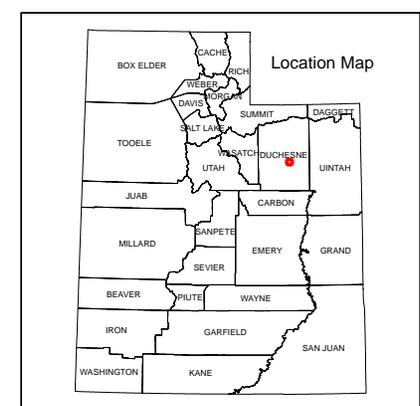
EP Energy E&P Company, L.P.  
Brad MacAfee – Drilling Engineer  
1001 Louisiana, Rm 2660D  
Houston, Texas 77002  
713-997-6383 – office  
281-813-0902 – Cell



**API Number: 4301352460**  
**Well Name: Flying Dutchman 3-21C4**  
**Township T03.0S Range R04.0W Section 21**  
**Meridian: UBM**  
 Operator: EP ENERGY E&P COMPANY, L.P.

Map Prepared:  
 Map Produced by Diana Mason

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



Well Name	EP ENERGY E&P COMPANY, L.P. Flying Dutchman 3-21C4 430135246			
String	Cond	Surf	I1	L1
Casing Size(")	13.375	9.625	7.000	5.000
Setting Depth (TVD)	600	2500	8600	11600
Previous Shoe Setting Depth (TVD)	0	600	2500	8600
Max Mud Weight (ppg)	8.8	9.3	10.0	11.5
BOPE Proposed (psi)	1000	1000	5000	10000
Casing Internal Yield (psi)	2730	5750	11220	13940
Operators Max Anticipated Pressure (psi)	6937			11.5

Calculations	Cond String	13.375	"
Max BHP (psi)	.052*Setting Depth*MW=	275	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	203	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	143	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	143	NO
Required Casing/BOPE Test Pressure=		600	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

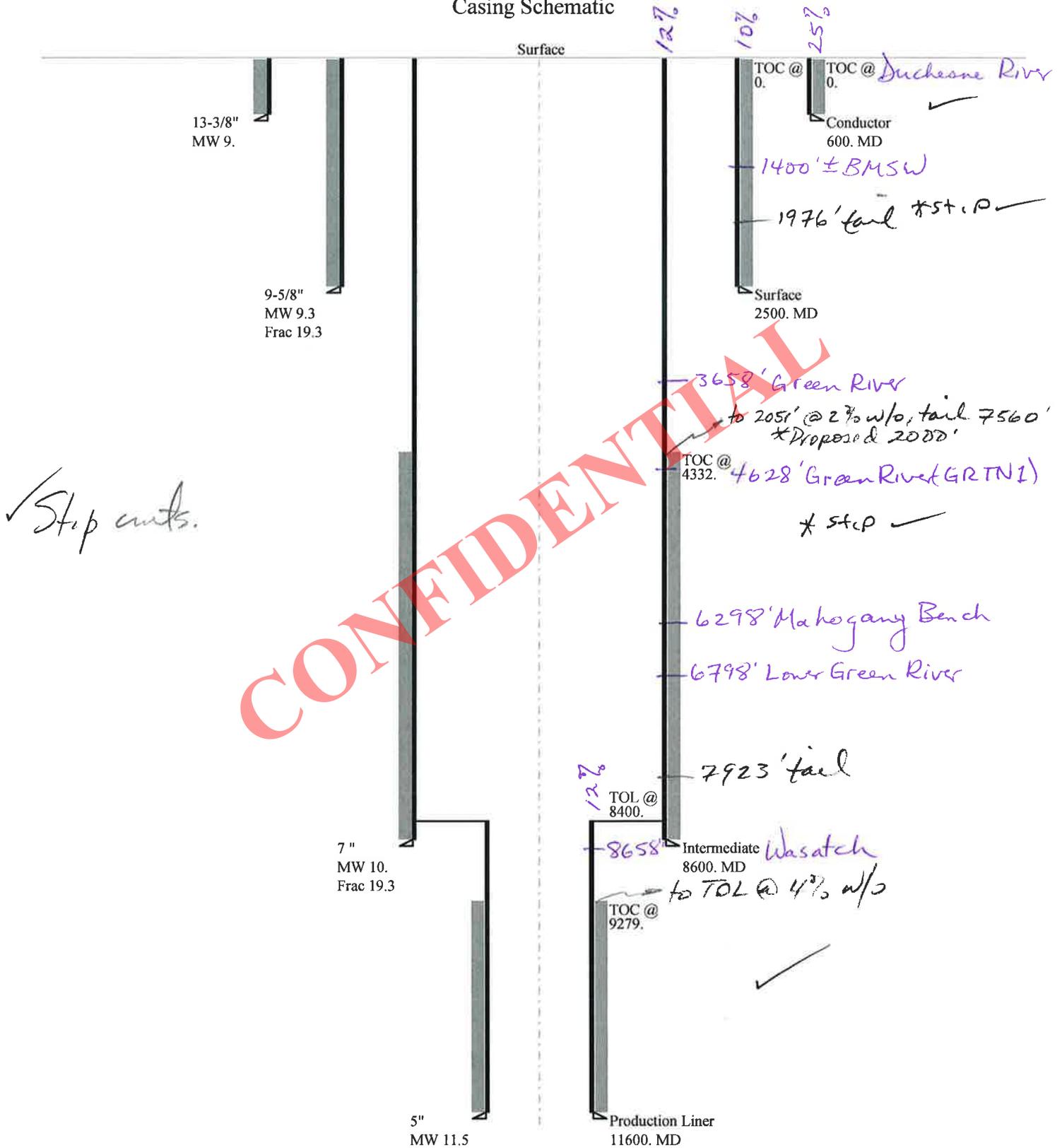
Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	1209	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	909	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	659	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	791	NO OK
Required Casing/BOPE Test Pressure=		2500	psi
*Max Pressure Allowed @ Previous Casing Shoe=		600	psi *Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	4472	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3440	YES 5M BOPE, 5M kill lines & choke manifold
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2580	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3130	NO OK
Required Casing/BOPE Test Pressure=		7854	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2500	psi *Assumes 1psi/ft frac gradient

Calculations	L1 String	5.000	"
Max BHP (psi)	.052*Setting Depth*MW=	6937	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	5545	YES 10M BOPE w/rotating head, 5M annular,
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	4385	YES blind rams & mud cross
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	6277	YES OK
Required Casing/BOPE Test Pressure=		9758	psi
*Max Pressure Allowed @ Previous Casing Shoe=		8600	psi *Assumes 1psi/ft frac gradient

# 43013524600000 Flying Dutchman 3-21C4

## Casing Schematic



Well name:	<b>43013524600000 Flying Dutchman 3-21C4</b>		
Operator:	<b>EP ENERGY E&amp;P COMPANY, L.P.</b>		
String type:	Conductor	Project ID:	43-013-52460
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

Mud weight: 9.000 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 82 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,000 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 208 psi  
 Internal gradient: 0.120 psi/ft  
 Calculated BHP 280 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.60 (B)

**Non-directional string.**

Tension is based on air weight.  
 Neutral point: 520 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	600	13.375	54.50	J-55	ST&C	600	600	12.49	7442
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	280	1130	4.030	280	2730	9.74	32.7	514	15.72 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 801 538-5357  
 FAX: 801-359-3940

Date: October 17, 2013  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 600 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013524600000 Flying Dutchman 3-21C4</b>		
Operator:	<b>EP ENERGY E&amp;P COMPANY, L.P.</b>		
String type:	Surface	Project ID:	43-013-52460
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

Mud weight: 9.300 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 109 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 1,950 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 2,500 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.70 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on air weight.  
 Neutral point: 2,154 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 8,600 ft  
 Next mud weight: 10.000 ppg  
 Next setting BHP: 4,468 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 2,500 ft  
 Injection pressure: 2,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2500	9.625	40.00	N-80	LT&C	2500	2500	8.75	31809
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1208	3090	2.559	2500	5750	2.30	100	737	7.37 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 801 538-5357  
 FAX: 801-359-3940

Date: October 17, 2013  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 2500 ft, a mud weight of 9.3 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013524600000 Flying Dutchman 3-21C4</b>		
Operator:	<b>EP ENERGY E&amp;P COMPANY, L.P.</b>		
String type:	Intermediate	Project ID:	43-013-52460
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

Mud weight: 10.000 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 194 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,000 ft

Cement top: 4,332 ft

**Burst**

Max anticipated surface pressure: 4,378 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 6,270 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.60 (B)

Tension is based on air weight.  
 Neutral point: 7,298 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 11,600 ft  
 Next mud weight: 11.500 ppg  
 Next setting BHP: 6,930 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 8,600 ft  
 Injection pressure: 8,600 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	8600	7	29.00	HCP-110	LT&C	8600	8600	6.059	97116
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4468	9200	2.059	6270	11220	1.79	249.4	797	3.20 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 801 538-5357  
 FAX: 801-359-3940

Date: October 17, 2013  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 8600 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013524600000 Flying Dutchman 3-21C4</b>		
Operator:	<b>EP ENERGY E&amp;P COMPANY, L.P.</b>		
String type:	Production Liner	Project ID:	43-013-52460
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

Mud weight: 11.500 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 236 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,000 ft

**Burst**

Max anticipated surface pressure: 4,378 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 6,930 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.60 (B)

Tension is based on air weight.  
 Neutral point: 11,040 ft

Cement top: 9,279 ft

Liner top: 8,400 ft

**Non-directional string.**

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	3200	5	18.00	HCP-110	ST-L	11600	11600	4.151	253440
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	6930	15360	2.216	6930	13940	2.01	57.6	341	5.92 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 801-538-5357  
 FAX: 801-359-3940

Date: October 17, 2013  
 Salt Lake City, Utah

**Remarks:**

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 11600 ft, a mud weight of 11.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** EP ENERGY E&P COMPANY, L.P.  
**Well Name** Flying Dutchman 3-21C4  
**API Number** 43013524600000      **APD No** 8559    **Field/Unit** ALTAMONT  
**Location: 1/4,1/4 SESE**    **Sec** 21    **Tw** 3.0S    **Rng** 4.0W    1308 FSL 1048 FEL  
**GPS Coord (UTM)** 556539 4450465      **Surface Owner** Stephen Gawarecki

### Participants

Jared Thacker (EP Energy); Dennis Ingram (DOGM)

### Regional/Local Setting & Topography

The proposed Flying Dutchman 3-21C4 well is located in northeastern Utah or the Uintah Basin approximately 3.54 miles north of Duchense Utah along US Highway 87, then east along a class B county road for another 2.63 miles, then south on existing gravel road for another 0.73 miles, then east 0.27 miles down a new access road into wellsite. Topography setting is the lower or southern end of Blue Bench on the upper reaches of a long point that breaks off to the south into the Duchesne River Basin. The immediate topography at the proposed well pad slopes to the south and west in sparse sagebrush, open habitat. A large, dry drainage runs south immediately to the west of this pad which most likely drains any snow melt, flash flood or storm waters south toward the Duchesne River--that drainage has vegetation along the bottoms and does not show erosion from high water events.

### Surface Use Plan

#### **Current Surface Use**

Recreational  
Wildlfe Habitat

#### **New Road Miles**

0.27

#### **Well Pad**

**Width** 404    **Length** 465

#### **Src Const Material**

Onsite

#### **Surface Formation**

UNTA

**Ancillary Facilities** N

**Waste Management Plan Adequate?** Y

### Environmental Parameters

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

Rabbit brush, sparse sagebrush, grass, prickly pear cactus; potential mule deer, coyote, rabbit, raccoon, smaller mammals and birds native to region, no perching for those birds in immediate area.

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

Reddish, fine-grained sandy loam with some clays present

**Erosion Issues** Y

**Sedimentation Issues** Y

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

Below fill slope along western side of location, from corners two, three and four.

**Paleo Survey Run?** N **Paleo Potential Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N**Reserve Pit**

<b>Site-Specific Factors</b>	<b>Site Ranking</b>	
<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>	Not Present	0
	<b>Final Score</b>	25 1 Sensitivity Level

**Characteristics / Requirements**

Proposed along the northern boundary of the location in cut, measuring 110' wide by 150' long, by 12' deep.

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

Dry drainage along the southwestern side of location that might drain the flash flood or snow melt toward the Duchense River bottoms. Operator has proposed rounding corner number 2. Silt fencing should be installed below the fill slope to keep sediment and outwash out of that dry drainage.

Dennis Ingram  
Evaluator10/3/2013  
Date / Time

# Application for Permit to Drill Statement of Basis

## Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
8559	43013524600000	LOCKED	OW	P	No
<b>Operator</b>	EP ENERGY E&P COMPANY, L.P.		<b>Surface Owner-APD</b>	Stephen Gawarecki	
<b>Well Name</b>	Flying Dutchman 3-21C4		<b>Unit</b>		
<b>Field</b>	ALTAMONT		<b>Type of Work</b>	DRILL	
<b>Location</b>	SESE 21 3S 4W U 1308 FSL 1048 FEL GPS Coord (UTM) 556540E 4450464N				

### Geologic Statement of Basis

El Paso proposes to set 600 feet of conductor and 2,500 feet of surface casing both of which will be cemented to surface. The surface and intermediate holes will be drilled utilizing fresh water mud. The estimated depth to the base of moderately saline ground water is 1,400 feet. A search of Division of Water Rights records indicates that there are 8 water wells within a 10,000 foot radius of the center of Section 21. These wells probably produce water from near surface alluvium and the Duchesne River Formation. Depths of the wells fall in the range of 30-300 feet. The wells are listed as being used for irrigation, stock watering and domestic. The nearest water wells are nearly a mile north of the proposed well. The proposed drilling, casing and cement program should adequately protect the highly used Duchesne River aquifer.

Brad Hill  
APD Evaluator

10/16/2013  
Date / Time

### Surface Statement of Basis

A presite was scheduled and performed on October 3, 2013 to take input and address issues regarding the construction and drilling of the Flying Dutchman 3-21C4 well. Clifford & Kathleen Conover and Stephen Gawarecki both own lands impacted by this proposed location and were therefore invited to participate in the onsite meeting but did not attend. Both landowners have signed a landowner agreement with EP Energy.

The location stakes up along the western side of a long, sloping point that breaks off Blue Bench into the Duchesne River bottom country. The greatest cut is along the northeastern corner at 8.4 feet, with the greatest fill at the southwestern corner (number 2) with 17.1 feet. A large, dry drainage cuts to the south just west of corner number 2 and needs protected from fill and or sediment from the fill slope of the location. Therefore, the operator shall round corner number 2 and install a silt fence below the fill slope of that corner to prevent materials from blocking that potential drainage. The reserve pit shall be lined with a 20 mil synthetic liner like is shown in EP Energy operation plans. The location shall also be bermed and maintained to prevent fluids from leaving this wellsite.

Dennis Ingram  
Onsite Evaluator

10/3/2013  
Date / Time

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

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.

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 leaving the pad.
Surface	Silt fencing installed below the fill slope around location corner number 2 to prevent sediment from fill slope from entering and blocking dray drainage to the west.

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## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 9/5/2013

API NO. ASSIGNED: 4301352460000

WELL NAME: Flying Dutchman 3-21C4

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

PHONE NUMBER: 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: SESE 21 030S 040W

Permit Tech Review: 

SURFACE: 1308 FSL 1048 FEL

Engineering Review: 

BOTTOM: 1308 FSL 1048 FEL

Geology Review: 

COUNTY: DUCHESNE

LATITUDE: 40.20267

LONGITUDE: -110.33567

UTM SURF EASTINGS: 556540.00

NORTHINGS: 4450464.00

FIELD NAME: ALTAMONT

LEASE TYPE: 4 - Fee

LEASE NUMBER: Fee

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

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

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

Commingling Approved

## LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 139-90
- Effective Date: 5/9/2012
- Siting: (4) WELLS PER 640 ACRE
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhll  
8 - Cement to Surface -- 2 strings - hmacdonald  
12 - Cement Volume (3) - hmacdonald



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## Permit To Drill

\*\*\*\*\*

**Well Name:** Flying Dutchman 3-21C4  
**API Well Number:** 43013524600000  
**Lease Number:** Fee  
**Surface Owner:** FEE (PRIVATE)  
**Approval Date:** 10/22/2013

### 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 139-90. 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:

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

Cement volumes for the 13 3/8" and 9 5/8" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 2000' MD as indicated in the submitted drilling plan.

### Additional Approvals:

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

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

**Notification Requirements:**

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

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

**Contact Information:**

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

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

**Reporting Requirements:**

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

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

Approved By:

**Approved by:**

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

For John Rogers  
Associate Director, Oil & Gas

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Carol Daniels <caroldaniels@utah.gov>

SE SE Sec-21 TOSS RO4W

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## Flying Dutchman 3-21C4 24hr Spud & Set Casing Notice

1 message

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

Thu, Dec 19, 2013 at 5:55 PM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "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>

RE: EP ENERGY

Flying Dutchman 3-21C4

API # 43013524600000

DUCHESNE CO., UTAH

Leon Ross Drilling **spudded** well @14:00hrs **12/19/2013** and plan to set +/-600' of 13 3/8" casing within 24hrs. Drilling will resume when Patterson 307 is mobilized to location within the next +/-30 days.

Regards,

EP Energy

Patterson 307

Rig Office: 832-266-0503

RECEIVED

DEC 19 2013

DIV. OF OIL, GAS & MINING

EP



**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 December 9, 2014****Well Name: Flying Dutchman 3-21C4****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>9396'-9683'</b>	<b>.43</b>	<b>69</b>	<b>Open</b>
<b>9134'-9380'</b>	<b>.43</b>	<b>69</b>	<b>Open</b>
<b>8833'-9104'</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>9711'-9951'</b>	<b>5000 gal acid, 3000# 100 mesh, 152800# 20/40 TLC</b>
<b>9396'-9683'</b>	<b>5000 gal acid, 3000# 100 mesh, 161300 20/40 TLC</b>
<b>9134'-9380'</b>	<b>5000 gal acid, 3000# 100 mesh, 149300# 20/40 TLC</b>
<b>8833'-9104'</b>	<b>5000 gal acid, 3000# 100 mesh, 125300# 20/40 TLC</b>



**Company:** EP Energy  
**Well:** Flying Dutchman 3-21C4  
**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	0.36	220.76	100.00	100.00	-0.24	0.24	S	0.21	W	0.32	220.76	0.36	0.36	220.76
2	200.00	0.28	266.65	100.00	200.00	-0.49	0.49	S	0.65	W	0.82	232.97	0.26	-0.09	45.90
3	300.00	0.51	226.12	100.00	300.00	-0.82	0.82	S	1.22	W	1.47	236.11	0.35	0.24	-40.54
4	400.00	0.49	225.10	100.00	399.99	-1.43	1.43	S	1.85	W	2.34	232.19	0.02	-0.02	-1.02
5	500.00	0.37	227.82	100.00	499.99	-1.95	1.95	S	2.39	W	3.09	230.75	0.12	-0.12	2.72
6	600.00	0.46	173.40	100.00	599.99	-2.57	2.57	S	2.58	W	3.65	225.14	0.39	0.09	-54.41
7	700.00	0.71	215.29	100.00	699.98	-3.47	3.47	S	2.89	W	4.52	219.79	0.48	0.24	41.89
8	800.00	0.65	218.42	100.00	799.97	-4.42	4.42	S	3.60	W	5.70	219.17	0.07	-0.06	3.13
9	900.00	1.05	191.35	100.00	899.96	-5.76	5.76	S	4.13	W	7.09	215.67	0.55	0.40	-27.07
10	1000.00	0.88	213.74	100.00	999.95	-7.29	7.29	S	4.74	W	8.69	213.02	0.41	-0.17	22.39
11	1100.00	1.02	209.35	100.00	1099.94	-8.70	8.70	S	5.60	W	10.34	212.76	0.15	0.14	-4.39
12	1200.00	1.14	210.56	100.00	1199.92	-10.32	10.32	S	6.53	W	12.22	212.33	0.12	0.12	1.21
13	1300.00	1.17	230.52	100.00	1299.90	-11.83	11.83	S	7.83	W	14.18	213.50	0.40	0.04	19.96
14	1400.00	1.16	224.20	100.00	1399.88	-13.20	13.20	S	9.32	W	16.16	215.23	0.13	-0.01	-6.32
15	1500.00	1.37	223.24	100.00	1499.85	-14.80	14.80	S	10.85	W	18.35	216.24	0.21	0.21	-0.95
16	1600.00	1.80	206.76	100.00	1599.82	-17.08	17.08	S	12.38	W	21.09	215.94	0.62	0.43	-16.48
17	1700.00	1.98	213.44	100.00	1699.76	-19.92	19.92	S	14.04	W	24.37	215.17	0.28	0.18	6.68
18	1800.00	2.27	207.39	100.00	1799.69	-23.11	23.11	S	15.90	W	28.05	214.52	0.37	0.29	-6.05
19	1900.00	2.43	202.12	100.00	1899.61	-26.84	26.84	S	17.60	W	32.10	213.27	0.27	0.17	-5.27
20	1950.00	2.71	203.58	50.00	1949.56	-28.90	28.90	S	18.48	W	34.30	212.59	0.57	0.56	2.92
21	2042.00	2.51	203.71	92.00	2041.46	-32.74	32.74	S	20.16	W	38.45	211.62	0.22	-0.22	0.14
22	2137.00	1.91	253.49	95.00	2136.40	-35.10	35.10	S	22.51	W	41.70	212.68	2.04	-0.63	52.40
23	2232.00	1.10	341.09	95.00	2231.38	-34.68	34.68	S	24.33	W	42.36	215.04	2.28	-0.85	92.21
24	2328.00	1.17	324.91	96.00	2327.36	-33.01	33.01	S	25.19	W	41.52	217.35	0.34	0.07	-16.85
25	2424.00	1.82	348.69	96.00	2423.33	-30.71	30.71	S	26.05	W	40.27	220.30	0.92	0.68	24.77
26	2520.00	0.66	339.42	96.00	2519.30	-28.70	28.70	S	26.54	W	39.09	222.76	1.22	-1.21	-9.66
27	2616.00	1.26	31.53	96.00	2615.29	-27.28	27.28	S	26.19	W	37.82	223.83	1.04	0.63	-320.72
28	2711.00	1.15	10.60	95.00	2710.27	-25.46	25.46	S	25.46	W	36.01	225.01	0.47	-0.12	-22.03
29	2806.00	1.06	347.40	95.00	2805.25	-23.66	23.66	S	25.48	W	34.77	227.12	0.48	-0.09	354.53
30	2900.00	2.03	358.12	94.00	2899.22	-21.15	21.15	S	25.72	W	33.30	230.58	1.07	1.03	11.40
31	2995.00	1.69	351.83	95.00	2994.17	-18.08	18.08	S	25.98	W	31.65	235.17	0.42	-0.36	-6.62
32	3089.00	1.31	347.11	94.00	3088.13	-15.66	15.66	S	26.42	W	30.71	239.34	0.42	-0.40	-5.02
33	3185.00	0.87	356.02	96.00	3184.12	-13.86	13.86	S	26.71	W	30.09	242.57	0.49	-0.46	9.28
34	3279.00	1.02	51.02	94.00	3278.10	-12.63	12.63	S	26.11	W	29.00	244.20	0.94	0.16	-324.47
35	3375.00	0.67	58.35	96.00	3374.09	-11.79	11.79	S	24.97	W	27.61	244.72	0.38	-0.36	7.64



**Company:** EP Energy  
**Well:** Flying Dutchman 3-21C4  
**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	3470.00	1.65	23.20	95.00	3469.07	-10.24	10.24	S	23.96	W	26.06	246.85	1.23	1.03	-37.00
37	3564.00	0.80	350.58	94.00	3563.05	-8.35	8.35	S	23.53	W	24.97	250.46	1.14	-0.90	348.28
38	3660.00	1.85	358.58	96.00	3659.03	-6.14	6.14	S	23.68	W	24.46	255.46	1.11	1.09	8.33
39	3756.00	1.45	354.52	96.00	3754.99	-3.38	3.38	S	23.83	W	24.07	261.92	0.43	-0.42	-4.23
40	3850.00	1.74	339.47	94.00	3848.95	-0.86	0.86	S	24.45	W	24.46	267.98	0.54	0.31	-16.01
41	3946.00	1.64	332.31	96.00	3944.91	1.72	1.72	N	25.60	W	25.65	273.84	0.24	-0.10	-7.46
42	4042.00	0.86	300.03	96.00	4040.89	3.29	3.29	N	26.86	W	27.06	276.99	1.06	-0.81	-33.63
43	4137.00	0.99	229.31	95.00	4135.88	3.12	3.12	N	28.10	W	28.27	276.33	1.13	0.14	-74.44
44	4233.00	1.59	220.88	96.00	4231.85	1.57	1.57	N	29.60	W	29.64	273.03	0.65	0.63	-8.78
45	4328.00	0.56	310.95	95.00	4326.84	0.88	0.88	N	30.81	W	30.83	271.63	1.78	-1.08	94.81
46	4424.00	0.37	298.77	96.00	4422.83	1.33	1.33	N	31.44	W	31.47	272.43	0.22	-0.20	-12.69
47	4518.00	1.72	354.82	94.00	4516.82	2.88	2.88	N	31.83	W	31.96	275.18	1.64	1.44	59.63
48	4612.00	2.05	13.76	94.00	4610.77	5.92	5.92	N	31.56	W	32.11	280.63	0.75	0.35	-362.83
49	4708.00	0.58	7.07	96.00	4706.74	8.07	8.07	N	31.09	W	32.12	284.55	1.54	-1.53	-6.97
50	4804.00	0.50	208.74	96.00	4802.74	8.19	8.19	N	31.23	W	32.29	284.69	1.11	-0.08	210.07
51	4900.00	1.20	187.48	96.00	4898.73	6.82	6.82	N	31.57	W	32.29	282.20	0.79	0.73	-22.15
52	4994.00	1.33	171.88	94.00	4992.71	4.77	4.77	N	31.54	W	31.90	278.59	0.39	0.14	-16.60
53	5090.00	0.28	53.97	96.00	5088.70	3.80	3.80	N	31.19	W	31.42	276.95	1.54	-1.09	-122.82
54	5186.00	1.17	344.75	96.00	5184.69	4.89	4.89	N	31.26	W	31.64	278.88	1.15	0.93	302.90
55	5282.00	2.12	343.31	96.00	5280.65	7.53	7.53	N	32.03	W	32.90	283.23	0.99	0.99	-1.50
56	5377.00	2.75	353.94	95.00	5375.56	11.48	11.48	N	32.77	W	34.73	289.31	0.81	0.66	11.19
57	5473.00	2.07	349.83	96.00	5471.48	15.48	15.48	N	33.32	W	36.74	294.91	0.73	-0.71	-4.28
58	5568.00	1.11	341.89	95.00	5566.44	18.04	18.04	N	33.91	W	38.41	298.01	1.03	-1.01	-8.36
59	5664.00	0.64	280.21	96.00	5662.43	19.02	19.02	N	34.73	W	39.60	298.71	1.02	-0.49	-64.25
60	5760.00	1.16	232.95	96.00	5758.42	18.53	18.53	N	36.03	W	40.52	297.22	0.90	0.54	-49.23
61	5856.00	1.69	196.09	96.00	5854.39	16.58	16.58	N	37.20	W	40.73	294.03	1.07	0.55	-38.40
62	5951.00	2.13	174.46	95.00	5949.34	13.48	13.48	N	37.42	W	39.77	289.81	0.88	0.46	-22.77
63	6046.00	0.91	110.68	95.00	6044.31	11.46	11.46	N	36.54	W	38.29	287.41	2.01	-1.28	-67.14
64	6142.00	0.78	5.52	96.00	6140.30	11.84	11.84	N	35.76	W	37.67	288.31	1.40	-0.14	-109.54
65	6237.00	0.38	352.66	95.00	6235.30	12.79	12.79	N	35.74	W	37.96	289.70	0.44	-0.42	365.41
66	6333.00	0.25	219.59	96.00	6331.30	12.95	12.95	N	35.92	W	38.18	289.83	0.60	-0.14	-138.61
67	6428.00	0.89	211.77	95.00	6426.29	12.16	12.16	N	36.44	W	38.41	288.46	0.68	0.67	-8.23
68	6524.00	1.37	212.31	96.00	6522.27	10.56	10.56	N	37.44	W	38.90	285.75	0.50	0.50	0.56
69	6620.00	1.69	202.04	96.00	6618.24	8.28	8.28	N	38.59	W	39.47	282.10	0.44	0.33	-10.70
70	6715.00	1.61	190.23	95.00	6713.20	5.66	5.66	N	39.35	W	39.76	278.19	0.37	-0.08	-12.43
71	6810.00	1.77	188.81	95.00	6808.16	2.90	2.90	N	39.81	W	39.92	274.17	0.17	0.17	-1.49
72	6906.00	1.74	189.47	96.00	6904.11	0.00	0.00	S	40.28	W	40.28	270.00	0.04	-0.03	0.69



**Company:** EP Energy  
**Well:** Flying Dutchman 3-21C4  
**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	7002.00	2.05	191.47	96.00	7000.06	-3.12	3.12	S	40.86	W	40.98	265.63	0.33	0.32	2.08
74	7098.00	1.79	186.05	96.00	7096.01	-6.30	6.30	S	41.36	W	41.84	261.34	0.33	-0.27	-5.65
75	7194.00	2.14	187.93	96.00	7191.95	-9.56	9.56	S	41.77	W	42.85	257.10	0.37	0.36	1.96
76	7289.00	2.45	188.35	95.00	7286.87	-13.33	13.33	S	42.31	W	44.35	252.51	0.33	0.33	0.44
77	7385.00	2.04	180.07	96.00	7382.80	-17.07	17.07	S	42.61	W	45.90	248.17	0.54	-0.43	-8.63
78	7481.00	1.96	187.52	96.00	7478.74	-20.40	20.40	S	42.82	W	47.43	244.52	0.28	-0.08	7.76
79	7575.00	2.18	182.50	94.00	7572.68	-23.78	23.78	S	43.11	W	49.24	241.12	0.30	0.23	-5.34
80	7671.00	2.46	186.12	96.00	7668.60	-27.66	27.66	S	43.41	W	51.47	237.50	0.33	0.29	3.77
81	7766.00	2.53	187.98	95.00	7763.51	-31.76	31.76	S	43.92	W	54.20	234.13	0.11	0.07	1.96
82	7862.00	2.50	188.59	96.00	7859.42	-35.93	35.93	S	44.52	W	57.21	231.10	0.04	-0.03	0.64
83	7958.00	2.83	200.56	96.00	7955.32	-40.22	40.22	S	45.67	W	60.85	228.63	0.67	0.34	12.47
84	8054.00	1.63	202.56	96.00	8051.24	-43.70	43.70	S	47.03	W	64.19	227.10	1.25	-1.25	2.08
85	8149.00	1.79	203.19	95.00	8146.20	-46.31	46.31	S	48.13	W	66.79	226.10	0.17	0.17	0.66
86	8245.00	2.35	205.29	96.00	8242.14	-49.47	49.47	S	49.56	W	70.02	225.05	0.59	0.58	2.19
87	8435.00	1.00	181.96	190.00	8432.05	-54.65	54.65	S	51.28	W	74.94	223.18	0.78	-0.71	-12.28
88	8530.00	0.99	164.65	95.00	8527.04	-56.27	56.27	S	51.09	W	76.00	222.24	0.32	-0.01	-18.22
89	8625.00	0.91	179.06	95.00	8622.03	-57.81	57.81	S	50.86	W	77.00	221.34	0.26	-0.08	15.17
90	8784.00	1.30	180.09	159.00	8781.00	-60.88	60.88	S	50.84	W	79.32	219.87	0.25	0.25	0.65
91	8900.00	1.95	178.27	116.00	8896.95	-64.16	64.16	S	50.79	W	81.83	218.36	0.56	0.56	-1.57
92	9000.00	2.23	180.57	100.00	8996.88	-67.80	67.80	S	50.75	W	84.70	216.82	0.29	0.28	2.30
93	9100.00	2.87	175.87	100.00	9096.78	-72.24	72.24	S	50.59	W	88.19	215.01	0.67	0.64	-4.70
94	9200.00	3.54	179.47	100.00	9196.63	-77.82	77.82	S	50.39	W	92.71	212.92	0.70	0.68	3.60
95	9300.00	3.72	189.36	100.00	9296.43	-84.10	84.10	S	50.88	W	98.30	211.17	0.65	0.18	9.89
96	9400.00	3.76	192.85	100.00	9396.21	-90.50	90.50	S	52.14	W	104.45	209.95	0.23	0.04	3.50
97	9500.00	3.73	187.45	100.00	9496.00	-96.92	96.92	S	53.29	W	110.61	208.80	0.35	-0.03	-5.40
98	9600.00	3.80	195.09	100.00	9595.79	-103.34	103.34	S	54.57	W	116.87	207.84	0.51	0.07	7.64
99	9700.00	3.96	189.56	100.00	9695.56	-109.94	109.94	S	56.01	W	123.39	207.00	0.41	0.17	-5.52
100	9800.00	4.17	188.20	100.00	9795.31	-116.95	116.95	S	57.10	W	130.15	206.02	0.23	0.20	-1.36
101	9900.00	3.99	185.13	100.00	9895.05	-124.01	124.01	S	57.93	W	136.88	205.04	0.28	-0.18	-3.08
102	10000.00	4.07	191.61	100.00	9994.81	-130.96	130.96	S	58.96	W	143.62	204.24	0.46	0.08	6.49
103	10100.00	3.81	188.11	100.00	10094.57	-137.72	137.72	S	60.14	W	150.28	203.59	0.36	-0.27	-3.50
104	10200.00	4.16	184.60	100.00	10194.33	-144.62	144.62	S	60.90	W	156.92	202.84	0.43	0.35	-3.52
105	10300.00	3.77	180.14	100.00	10294.09	-151.52	151.52	S	61.20	W	163.41	201.99	0.50	-0.39	-4.46
106	10400.00	3.79	175.31	100.00	10393.87	-158.09	158.09	S	60.94	W	169.43	201.08	0.32	0.02	-4.83
107	10500.00	3.81	180.51	100.00	10493.65	-164.70	164.70	S	60.70	W	175.53	200.23	0.35	0.03	5.20
108	10600.00	3.94	185.76	100.00	10593.42	-171.44	171.44	S	61.07	W	181.99	199.61	0.38	0.13	5.25
109	10700.00	4.19	182.24	100.00	10693.17	-178.50	178.50	S	61.56	W	188.82	199.03	0.35	0.25	-3.52



**Company:** EP Energy **Job Number:** \_\_\_\_\_  
**Well:** Flying Dutchman 3-21C4 **Mag Decl.:** \_\_\_\_\_  
**Location:** Duchesne, UT **Dir Driller:** \_\_\_\_\_  
**Rig:** Patterson 307 **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	10800.00	4.42	183.59	100.00	10792.89	-185.99	185.99	S	61.94	W	196.03	198.42	0.25	0.23	1.35
111	10900.00	4.30	182.99	100.00	10892.60	-193.58	193.58	S	62.38	W	203.38	197.86	0.12	-0.11	-0.60
112	11000.00	4.40	177.56	100.00	10992.31	-201.16	201.16	S	62.41	W	210.62	197.24	0.42	0.10	-5.43
113	11100.00	4.42	176.02	100.00	11092.02	-208.84	208.84	S	61.98	W	217.84	196.53	0.12	0.02	-1.54
114	11188.00	4.60	182.65	88.00	11179.75	-215.74	215.74	S	61.91	W	224.45	196.01	0.62	0.20	7.53
115	11300.00	4.60	182.65	112.00	11291.39	-224.70	224.70	S	62.32	W	233.18	195.50	0.00	0.00	0.00

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9  5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
<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.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.	8. WELL NAME and NUMBER: Flying Dutchman 3-21C4
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston, TX, 77002	PHONE NUMBER: 713 997-5038 Ext	9. API NUMBER: 43013524600000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1308 FSL 1048 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 21 Township: 03.0S Range: 04.0W Meridian: U	9. FIELD and POOL or WILDCAT: ALTAMONT	COUNTY: DUCHESNE  STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/25/2016	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input 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 attached recompletion procedure.

**Approved by the**  
**April 18, 2016**  
**Oil, Gas and Mining**

Date: \_\_\_\_\_  
 By:       D. K. Quist      

NAME (PLEASE PRINT) Linda Renken	PHONE NUMBER 713 997-5138	TITLE Sr. Regulatory Analyst
SIGNATURE N/A	DATE 4/15/2016	

## *Flying Dutchman 3-21C4 Recom Summary Procedure*

- POOH with co-rod, pump & tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing and joints of rods.
- Circulate & Clean wellbore
- Set 15k CBP for 5" 18# casing @ **8,808'** w/ 15' cement dump bailed on plug.
- Stage 1:
  - Perforate new UW interval from **8,622' – 8,742'**.
  - Prop frac perforations with with **60,000** lbs 30/50 prop (w/ **3,000** lbs 100 mesh & **6,000** gals 15% HCl acid) (Stage 1 Recom).
- Stage 2:
  - RIH with 5" CBP & set @ **8,610'**.
  - Perforate new CP70 interval from **8,432' – 8,458'**.
  - Acid frac perforations with **5,000** gals 15% HCl acid (Stage 2 Recom).
- Stage 3:
  - RIH w/ 7" CBP & set @ **8,253'**.
  - Perforate new LGR interval from **8,123' – 8,238'**.
  - Prop frac perforations with with **64,000** lbs 30/50 prop (w/ **3,000** lbs 100 mesh & **6,000** gals 15% HCl acid) (Stage 3 Recom).
- Stage 4:
  - RIH w/ 7" CBP & set @ **8,056'**.
  - Perforate new LGR interval from **8,008' – 8,041'**.
  - Acid frac perforations with **6,000** gals 15% HCl acid (Stage 4 Recom).
- Stage 5:
  - RIH w/ 7" CBP & set @ **7,963'**.
  - Perforate new LGR interval from **7,870' – 7,948'**.
  - Acid frac perforations with **10,000** gals 15% HCl acid (Stage 5 Recom).
- Stage 6:
  - RIH w/ 7" CBP & set @ **7,799'**.
  - Perforate new LGR interval from **7,626' – 7,784'**.
  - Prop Frac perforations with with **87,000** lbs 30/50 prop (w/ **3,000** lbs 100 mesh & **7,000** gals 15% HCl acid) (Stage 6 Recom).
- Clean out well drilling up (5) 7" CBPs, leaving 5" 15k CBP @ 8,808' w/ 15' CMT. (New PBTD @ 8,793'). Top perf BELOW plugs @ 8,833'.
- RIH w/ production tubing and rods.
- Clean location and resume production.

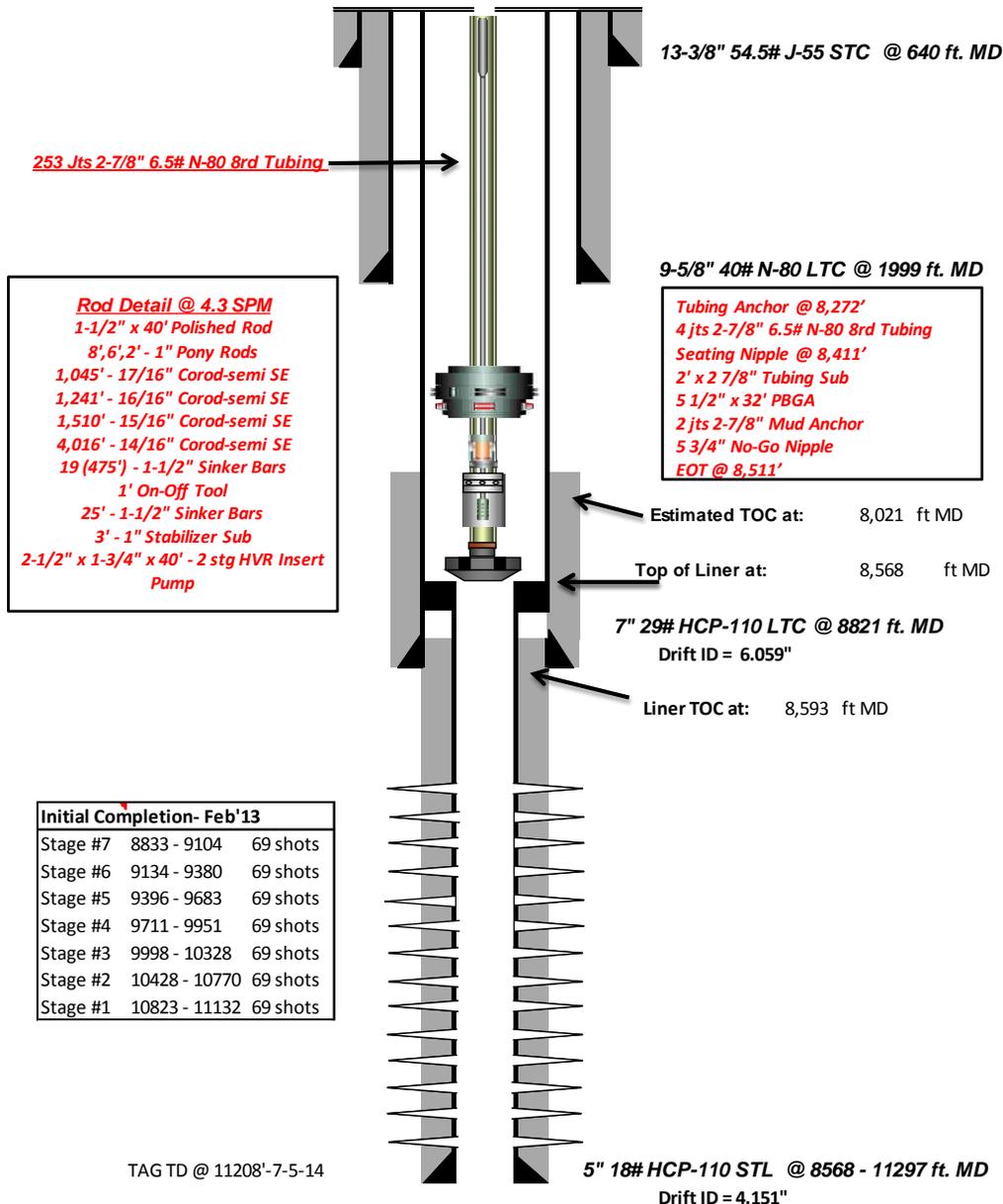
**Current WBS:**



**Current Pumping Schematic**

Well Name: **Flying Dutchman 3-21C4**  
 Company Name: **EP Energy**  
 Field, County, State: **Altamont, Duchesne County, UT**  
 Surface Location: **Lat: 40 12' 09.597"N Long: 110 20' 08.322"W**  
 Producing Zone(s): **Wasatch**

Last Updated: **4/13/2016**  
 By: **Kerr**  
 TD: **11297**  
 API: **43013524600000**  
 AFE: **161217**



Initial Completion- Feb'13		
Stage #7	8833 - 9104	69 shots
Stage #6	9134 - 9380	69 shots
Stage #5	9396 - 9683	69 shots
Stage #4	9711 - 9951	69 shots
Stage #3	9998 - 10328	69 shots
Stage #2	10428 - 10770	69 shots
Stage #1	10823 - 11132	69 shots

TAG TD @ 11208'-7-5-14

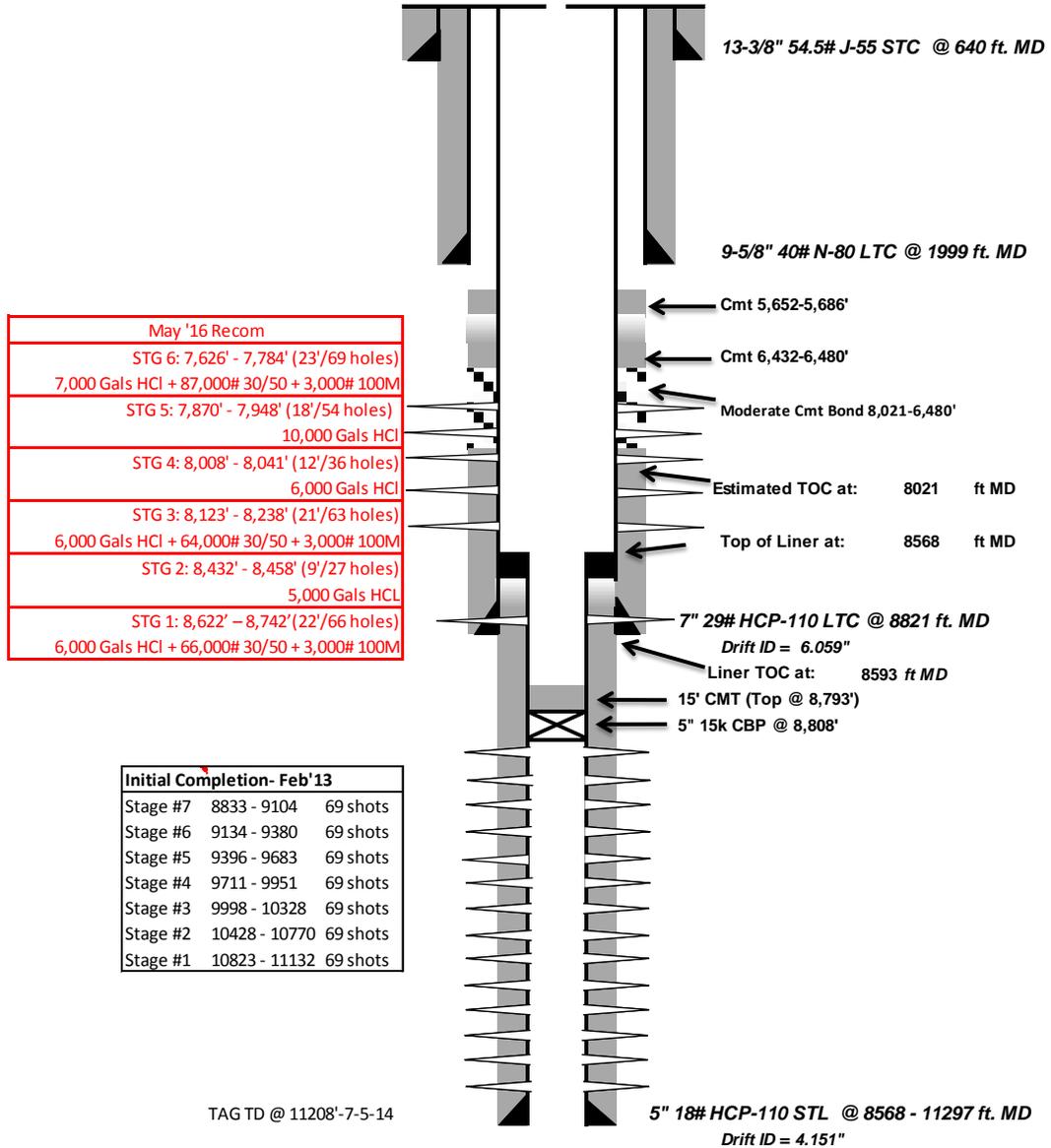
**Proposed WBS:**



**Proposed Pumping Schematic**

Well Name: Flying Dutchman 3-21C4  
 Company Name: EP Energy  
 Field, County, State: Altamont, Duchesne County, UT  
 Surface Location: Lat: 40 12' 09.597"N Long: 110 20' 08.322"W  
 Producing Zone(s): UW/CP70/LGR

Last Updated: 4/13/2016  
 By: Kerr  
 TD: 11,297'  
 API: 43013524600000  
 AFE: 0



May '16 Recom	
STG 6: 7,626' - 7,784' (23'/69 holes)	7,000 Gals HCl + 87,000# 30/50 + 3,000# 100M
STG 5: 7,870' - 7,948' (18'/54 holes)	10,000 Gals HCl
STG 4: 8,008' - 8,041' (12'/36 holes)	6,000 Gals HCl
STG 3: 8,123' - 8,238' (21'/63 holes)	6,000 Gals HCl + 64,000# 30/50 + 3,000# 100M
STG 2: 8,432' - 8,458' (9'/27 holes)	5,000 Gals HCl
STG 1: 8,622' - 8,742' (22'/66 holes)	6,000 Gals HCl + 66,000# 30/50 + 3,000# 100M

Initial Completion- Feb'13		
Stage #7	8833 - 9104	69 shots
Stage #6	9134 - 9380	69 shots
Stage #5	9396 - 9683	69 shots
Stage #4	9711 - 9951	69 shots
Stage #3	9998 - 10328	69 shots
Stage #2	10428 - 10770	69 shots
Stage #1	10823 - 11132	69 shots

TAG TD @ 11208'-7-5-14

**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 MD PLUG SET: 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
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- 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 Phone: 801-538-5340  
 1594 West North Temple, Suite 1210  
 Box 145801 Fax: 801-359-3940  
 Salt Lake City, Utah 84114-5801



## CENTRAL DIVISION

ALTAMONT FIELD  
FLYING DUTCHMAN 3-21C4  
FLYING DUTCHMAN 3-21C4  
RECOMPLETE LAND

### **Operation Summary Report**

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

**1 General****1.1 Customer Information**

Company	CENTRAL DIVISION
Representative	
Address	

**1.2 Well Information**

Well	FLYING DUTCHMAN 3-21C4		
Project	ALTAMONT FIELD	Site	FLYING DUTCHMAN 3-21C4
Rig Name/No.		Event	RECOMPLETE LAND
Start date	4/28/2016	End date	7/23/2016
Spud Date/Time	1/16/2014	UWI	FLYING DUTCHMAN 3-21C4
Active datum	KB @5,885.3usft (above Mean Sea Level)		
Afe No./Description	166707/56519 / FLYING DUTCHMAN 3-21C4		

**2 Summary****2.1 Operation Summary**

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
4/29/2016	6:00 9:00	3.00	WOR	28		P		MOVE COROD TO LOCATION. HOLD SAFETY MEETING ON PULLING COROD. FILL OUT & REVIEW JSA
	9:00 15:00	6.00	WOR	39		P		RIG UP COROD RIG. ATTEMPT TO UNSEAT PUMP. LEVELING RIG AS NEEDED TO KEEP FROM SINKING IN SOFT SOIL AROUND WELLHEAD. COULD NOT UNSEAT PUMP. RELEASE ON/OFF TOOL. POOH W/ COROD & 19 WEIGHT RODS. RD COROD RIG
	15:00 18:30	3.50	WOR	01		P		REPLACE SOFT SOIL AROUND WELLHEAD W/ GRAVEL. RU WORKOVER RIG. ND WELLHEAD. NU BOP. RELEASE TAC. SHUT WELL IN W/ TIW VALVE IN TBG, CLOSED & CAPPED, TBG LANDED ON HANGER W/PIPE RAMS CLOSED & LOCKED & CSG VALVES CLOSED & LOCKED
4/30/2016	6:00 7:00	1.00	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON PERFORATING TBG. FILL OUT & REVIEW JSA
	7:00 11:30	4.50	WOR	18		P		RU WIRELINE UNIT. RIH W/ 1-11/16" TBG PUNCHER & PERFORATE TBG 1 JT ABOVE PUMP. TBG VERY WAXY TO 4000'. POOH W/ TBG PUNCHER & RD WIRELINE UNIT
	11:30 12:00	0.50	WOR	08		P		FLUSH TBG W/ 60 BBLS 2% KCL WTR
	12:00 19:00	7.00	WOR	39		P		RU TBG SCANNING EQUIPMENT. TOOH W/ 145 JTS 2-7/8"EUE TBG, USING TBG TONGS OR POWER SWIVEL TO ROTATE TBG AS NEEDED TO FREE TAC. SDFN W/ TIW VALVE INSTALLED IN TBG (BARRIER 1) W/ NIGHT CAP INSTALLED ON TIW VALVE (BARRIER 2), PIPE RAMS CLOSED & LOCKED, OFF SIDE CSG VALVE CLOSED & CAPPED (BARRIERS 1 & 2) & YTREATER SIDE CSG VALVE OPEN TO TREATER
5/1/2016	6:00 6:00	24.00	WOR	28		P		NO ACTIVITY TODAY. SHUT DOWN FOR WEEKEND
5/2/2016	6:00 6:00	24.00	WOR	18		P		NO ACTIVITY TODAY. SHUT DOWN FOR WEEKEND
5/3/2016	6:00 8:00	2.00	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON SCANNING TBG. FILL OUT & REVIEW JSA
	8:00 10:00	2.00	WOR	39		P		CONTINUE SCANNING TBG OUT OF HOLE. LD BHA.FOUND 24 JTS RED BAND TBG, 43 BLUE & 151 JTS YELLOW.
	10:00 16:00	6.00	WLWORK	26		P		RU WIRELINE UNIT. RIH W/ 4-1/8"OD JUNK BASKET GUAGE RING TO 8820'. POOH. RIH W/ 6" GUAGE RING TO LT @ 8568'. POOH. RIH & SET 15K CBP @ 8808'. DUMP BAIL 15' CMT ON CBP SHUT WELL IN W/ BLIND RAMS CLOSED & LOCKED(BARRIER 1) & 15K CBP SET @ 8808' (BARRIER 2). CSG VALVE CLOSED (BARRIER 1) & CSG VALVE CAPPED (BARRIER 2). TREATER SIDE CSG VALVE IS OPEN TO TREATER

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
5/4/2016	6:00 7:00	1.00	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON NIPPLING UP FRAC STACK. FILL OUT & REVIEW JSA
	7:00 14:00	7.00	WOR	16		P		LAND TBG HANGER W/ 2 WAY CHECK INSTALLED, IN TBG HEAD. ND BOP (CBP BARRIER 1 & TBG HANGER W/ 2 WAY CHECK INSTALLED BARRIER 2). NU FRAC VALVE. FILL CSG W/ 200 BBLs 2% KCL WTR. PRESSURE TEST CSG TO 8000 PSI FOR 15 MINUTES. TESTED GOOD. BLEED PRESSURE OFF CSG. NU & PRESSURE TEST FRAC STACK TO 9500 PSI. NU & PRESSURE TEST FLOW BACK LINES TO 8000 PSI.
	14:00 16:30	2.50	STG01	21		P		RU WIRELINE UNIT. PRESSURE TEST LUBRICATOR TO 4500 PSI. RIH & PERFORATE STAGE 1 PERFORATIONS 8622' TO 8742' USING TITAN PERFECTA DEEPPENETRATING 22 GRAM CHARGES, 3 JSPF & 120 DEGREE PHASING. ALL PERFORATIONS WERE CORROLATED TO THE PERFORATORS SECTOR BOND/ GAMMA RAY / CCL LOG, RUN #1 DATED 2/12/2014. SHUT WELL IN W/ FRAC VALVE CLOSED (BARRIER 1), HCR VALVES CLOSED & LOCKED ( BARRIERS 2 & ), 2 CSG VALVES ON EACH SIDE OF WELL CLOSED & CAPPED ( BARRIERS 1,2 )
5/8/2016	6:00 7:00	1.00	STG01	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON FRAC SAFETY. FILL OUT & REVIEW JSA
	7:00 8:00	1.00	STG01	16		P		RU FRAC LINES
	8:00 11:30	3.50	STG01	42		N		UNLOAD & MIX ACID
	11:30 13:00	1.50	STG01	35		P		PRESSURE TEST LINES TO 9531 PSI. SICP 0 PSI. PUMP 22 BBLs 2% KCL WTR TO FILL CSG. BREAK DOWN STG 1 PERFORATIONS @ 3764 PSI PUMPING 9.8 BPM. TREAT STAGE 1 PERFORATIONS W/ 6000 GALLONS 15% ACID, FLUSHING TO BOTTOM PERF + 10 BBLs. ISIP 2789 PSI. FG .755. 5 MIN SICP 2391 PSI. 10 MIN SICP 2023 PSI. 15 MINB SICP 1691 PSI. TREAT PERFORATIONS W/6257 POUNDS 100 MESH SAND IN 1/2 PPG STAGE & 60393 POUNDS 30/50 WHITE SAND IN 1/2 PPG, 1PPG, 1.5 PPG, 2 PPG & 3PPG STAGES, FLUSHING TO TOP PERF. MAX PSI 5205 PSI. MAX RATE 77.9 BPM. AVG PSI 4506 PSI. AVG RATE 70.3 BPM FINAL ISIP 3208 PSI. FINAL FG .803. 5 MIN 2761 PSI. 10 MIN 2574 TURN WELL OVER TO WIRELINE. 2699 BBLs FLUID TO RECOVER
	13:00 14:30	1.50	STG02	21		P		RIH & SET CBP @ 8473'.PERFORATE STG 2 PERFORATIONS FROM 8432' TO 8458' USING PERFECTA DEEP PENETRATING 22 GRAM CHARGES, 3 JSPF & 120 DEGREE PHASING.PRESSURE DROPPED FROM 2200 PSI TO 1700 PSI WHILE PERFORATING.
	14:30 15:00	0.50	STG02	35		P		PRESSURE TEST LINES TO 9540 PSI. BREAK DOWN STG 2 PERFORATIONS @ 5166 PSI PUMPING 16.1 BPM. PERFORM STEP DOWN TEST. ISIP 2877 PSI. FG .774. 5 MIN 2741 PSI. 10 MIN 2709 PSI. 15 MIN 2687 PSI. TREAT STAGE 2 PERFORATIONS W/ 6000 GALLONS 15% HCL ACID USING 30 BIO BALL SEALERS DROPPING 10 BALLS EVERY 1500 GALLONS BEGINNING AT 1500 GALLONS, FLUSHING TO BOTTOM PERF + 10 BBLs. SAW GOOD DIVERSION. MAX PSI 7041 PSI. MAX RATE 50.6 BPM. AVG PSI 4577 PSI. AVG RATE 49.8 BPM. ISIP 2876 PSI. FINAL FG .774 5 MIN 2647 PSI. 10 MIN 2586 PSI. TURN WELL OVER TO WIRELINE. 718 BBLs FLUID TO RECOVER
15:00 19:00	4.00	STG03	21		P		RIH & SET CBP @ 8253'.PERFORATE STG 3 PERFORATIONS FROM 8008' TO 8238' IN 2 PERFORATING RUNS, USING PERFECTA DEEP PENETRATING 22 GRAM CHARGES, 3 JSPF & 120 DEGREE PHASING.PRESSURE DROPPED FROM 2400 PSI TO 2000 PSI WHILE PERFORATING.	

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	19:00 19:30	0.50	STG03	35		P		PRESSURE TEST LINES TO 9547 PSI. BREAK DOWN STG 3 PERFORATIONS @ 2519 PSI PUMPING 50.9 BPM. PERFORM STEP DOWN TEST. ISIP 1678 PSI. FG .640. 5 MIN 831 PSI. 10 MIN 720 PSI. 15 MIN 677 PSI. TREAT STAGE 3 PERFORATIONS W/ 27000 GALLONS 15% HCL ACID USING 112 BIO BALL SEALERS DROPPING 28 BALLS EVERY 5400 GALLONS BEGINNING AT 5400 GALLONS. FLUSHING TO BOTTOM PERF + 10 BBLs. SAW VERY LITTLE DIVERSION. MAX PSI 3292 PSI. MAX RATE 50.9 BPM. AVG PSI 2972 PSI. AVG RATE 50.5 BPM. ISIP 1747 PSI. FINAL FG .649 5 MIN 1428 PSI. 10 MIN 1296 PSI. TURN WELL OVER TO WIRELINE. 1119 BBLs FLUID TO RECOVER
	19:30 22:30	3.00	STG04	21		P		RIH & SET CBP @ 7799'. PERFORATE STG 4 PERFORATIONS FROM 7626" TO 7784', USING PERFECTA DEEP PENETRATING 22 GRAM CHARGES, 3 JSPF & 120 DEGREE PHASING. PRESSURE DROPPED FROM 1000 PSI TO 800 PSI WHILE PERFORATING. RD WIRELIN EQUIPMENT. SHUT WELL IN W/ FRAC VALVE CLOSED (BARRIER 1), HCR VALVES CLOSED & LOCKED ( BARRIERS 2 & ), 2 CSG VALVES ON EACH SIDE OF WELL CLOSED & CAPPED ( BARRIERS 1,2 )
5/9/2016	8:00 9:00	1.00	STG04	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON FRAC SAFETY. FILL OUT & REVIEW JSA
	9:00 11:00	2.00	STG04	18		P		START FRAC EQUIPMENT & PREPARE TO TREAT STAGE 4
	11:00 15:30	4.50	STG04	35		P		PRESSURE TEST LINES TO 9546 PSI. SICP 377 PSI. BREAK DOWN STG 4 PERFORATIONS @ 2331 PSI PUMPING 10.4 BPM. TREAT STAGE 4 PERFORATIONS W/ 7000 GALLONS 15% ACID, FLUSHING TO BOTTOM PERF + 10 BBLs. ISIP 1712 PSI. FG .656. 5 MIN SICP 1515 PSI. 10 MIN SICP 1401 PSI. 15 MIN SICP 1324 PSI. TREAT PERFORATIONS W/ 5943 POUNDS 100 MESH SAND IN 1/2 PPG STAGE & 86707 POUNDS 30/50 WHITE SAND IN 1/2 PPG, 1PPG, 1.5 PPG, 2 PPG & 3PPG STAGES, FLUSHING TO TOP PERF. MAX PSI 2732 PSI. MAX RATE 76.3 BPM. AVG PSI 2421 PSI. AVG RATE 74.9 BPM FINAL ISIP 2056 PSI. FINAL FG .700. 5 MIN 1790 PSI. 10 MIN 1686 SHUT WELL IN. 2986 BBLs FLUID TO RECOVER. RD FRAC EQUIPMENT
	15:30 6:00	14.50	FB	19		P		FLOW WELL TO FLOW BACK TANK. RECOVERED 431 BBLs FLUID. PRESSURE @ REPORT TIME 675 PSI ON A 12/64" CHOKE
5/10/2016	6:00 6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON FLOW BACK OPERATIONS. FILL OUT & REVIEW JSA
	6:30 6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 154 BBLs OIL & 565 BBLs WTR W/ GAS FLAIRING. WELL HEAD PRESSURE @ REPORT TIME 875 PSI ON A 16/64" CHOKE
5/11/2016	6:00 7:00	1.00	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON NIPPLING DOWN FRAC STACK. FILL OUT & REVIEW JSA
	7:00 8:30	1.50	WOR	16		P		ND FRAC STACK LEAVING HCR VALVE (BARRIER 1) & MANUAL FRAC VALVE (BARRIER 2)
	8:30 14:00	5.50	WOR	27		P		RU WIRELINE UNIT. PRESSURE TEST 3K LUBRICATER TO 2500 PSI ( WITH PERMISSION FROM TROY ANDERTON & ROBERT FONDERON). RIH W/ 6" GUAGE RING TO 7436'. POOH W/ GUAGE RING. RIH & SET KTX PKR @ 7426'. PRESSURE 1025 PSI. POOH W/ SETTING TOOL & RD WIRELINE UNIT.
	14:00 16:00	2.00	WOR	19		P		CSG PRESSURE 900 PSI. BLEED PRESSURE OFF WELL TO TREATER UNTIL PRESSURE DROPPED TO 100 PSI, THEN OPEN WELL TO FLOWBACK TANK UNTIL DEAD FOR 10 MINUTES
	16:00 17:30	1.50	WOR	16		P		ND HCR VALVE (BARRIER 1 PKR & BARRIER 2 FRAC VALVE. NIPPLE UP & TEST BOP. RU WORK FLOOR

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	17:30 19:30	2.00	WOR	39		P		RU HYDROTESTER. RIHW/ ON/OFF TOOL& 63 JTS 2-7/8"EUE TBG. WELL IN W/ PIPE RAMS CLOSED & LOCKED(BARRIER 1) & PKR SET @ 7426' (BARRIER 2). CSG VALVES CLOSED (BARRIER 1) & CSG VALVES CAPPED (BARRIER 2).
5/12/2016	6:00 7:00	1.00	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON HYDROTESTING TBG. FILL OUT & REVIEW JSA
	7:00 14:00	7.00	WOR	39		P		CONTINUE HYDROTESTING TBG IN HOLE W/ 140 JTS 2-7/8"EUE TBG FROM DERRICK. RD HYDROTESTER. PU 51 JTS 2-7/8"EUE TBG. ENGUAGE PACKER SET @ 7426' & MEASURE SPACE OUT. INSTALL BREECH LOCK TBG HANGER & LAND TBG
	14:00 15:30	1.50	WOR	06		P		CIRCULATE WELL W/ 300 BBLs PKR FLUID
	15:30 17:30	2.00	WOR	16		P		RELEASE TBG FROM BREECH LOCK TBG HANGER. RIH & ENGUAGE PKR. PU & LAND TBG IN 18K TENSION. (PUMP OUT PLUG BARRIER 1 & TIW VALVE BARRIER 2) BOP & FRAC STACK. PKR BARRIER (1 & FLUID BARRIER 2). REMOVE PUP JT & TIW VALVE. INSTALL 2 WAY CHECK VALVE IN TBG HANGER. NU & TEST WELL HEAD. REMOVE 2 WAY CHECK VALVE FROM TBG HANGER. PRESSURE TEST ANNULUS TO 1000 PSI. TESTED GOOD. PUMP OUT PLUG IN PKR @ 3400 PSI. FLUSH FLOWLINE. RD RIG. OPEN WELL TO TREATER. 540 PSI ON A 16/64" CHOKE
	17:30 6:00	12.50	FB	19		P		FLOW WELL TO TREATER
7/19/2016	7:00 8:30	1.50	WOR	28		P		HELD JSA W/ RIG CREW ON WORKING W/ FLOWING WELL
	8:30 18:00	9.50	WOR	16		P		MIRU PUMP 65 BBLs 2% KCL DOWN WELL, KILL TBG, N/D FLOW TREE WAIT ON 10M MANUEL FRAC VALVE, ARRIVED APPROX 3:30 PM N/U 10K X 10K SPOOL, 10M MANUEL VALVE, 5K X 10K SPOOL, 5K BOP, 5K ANNULAR PPRVENTER, W/ WASHINGTON HEAD ON TOP, LOW TEST ALL 300 PSI, HIGH TEST ALL 4000 PSI HIGH, P/U 5/8" RUN DOWN THREW BREETCH LOCK HANGER, "J" OFF AS1 PKR, P/U BACK THREW HANGER PULL HANGER TO SURFACE TAKE 2 WAY CHECK OUT & BREETCH HANGER, RIH "J" BACK ON PKR & RELEASE
	18:00 19:00	1.00	WOR	39		P		TOOH W/ 152 JT 2 7/8", LEFT 74 JT 2 7/8" N-80 TBG IN THE HOLE 2,442' +/-
	19:00 19:30	0.50	WOR	31		P		CLOSE LOCK PIPE RAMS 1ST BARRIER, CLOSE CSG VALVES SEND UP SALES INSTALL 2" BULL PLUG IN ALL POSSIBLE SPOTS, INSTALL TIW VALVE 1ST BARRIER, 2ND NIGHT CAP W/ NEEDLE VAVLE ON TOP SDFN
7/20/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ CREW BLOWING DOWN GAS OFF WELL
	7:30 9:00	1.50	WOR	39		P		TSIP 600, CSIP 100, HOOK UP BLEED OFF LINES, BLEED OFF TBG (START FLOW OIL & WATER!) BLEED OFF CSG DID THE SAME, R/U RIG PUMP TBG START PUMP THE TBG, 20 BBLs 2% KCL, 15 BBLs 2% DOWN CSG, TOOH W/ 74 JT 2 7/8" N-80 TBG, T-2 ON/OFF SHIRT, 7" KLX AS1 PKR, 2' X 2 7/8" PUP JT PUMP OUT PLUG

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	9:00 19:00	10.00	WOR	39		P		M/U 6" MILL TOOH BIT, 3 1/2" REG X 2 7/8" BIT SUB, TIH W/ 226 JT, P/U 12 JT 2 7/8" N-80 WORK OFF FLOAT TAG UP ON SAND @ 7,799' R/U DRILL EQUIPMENT CLEAN DOWN CBP @ 7,814' CIRC CLEAN DRILL UP PLUG, SWIVEL DOWN TAG REAMS & 2ND CBP @ 8,253' BRAKE CIRC DRILL UP REAMS & 2ND CBP, SWIVEL DOWN (IT STOP IN NEXT CSG COLLAR DRILL ON IT 20 MIN THEN IT FELL!) CONT SWIVEL DOWN TAG UP 3RD CBP @ 8,489' CIRC CLEAN SWIVEL DOWN TAG LT @ 8,568' MIN ON TOP 20 MIN +/- CIRC TOOH W/ 40 JTS 2 7/8" TBG 222 JT LEFT IN THE WELL EOT @ 7,297'
	19:00 20:00	1.00	WOR	31		P		CLOSE & LOCK PIPE RAMS, INSTALL TIW VAVLE 1ST BARRIER NIGHT CAP W/ NEEDLE VAVLE 2ND BARRIER HARD SHUT IN ( NOT SENT TO TREATER!)
7/21/2016	6:00 7:30	1.50	WOR	28		P		HELD SAFETY MEETING W/ CREW JSA ON HAVE STIFF ARM TONG VISUAL & SAFETY CABLE IN PLACE
	7:30 9:00	1.50	WOR	39		P		TSP1 150, CSIP 100, BLEED OFF BOTH SIDES FLOW BACK TANKS CHECK IGNITION SOURCE, UNLOCK RAMS & OPEN PULL TIW TOOH W/ 221 JT 2 7/8", XN-NIPPLE, 1 JT 2 7/8", 3 1/2" REG X 2 7/8" EUE BIT SUB & 6" MILL TOOTH BIT
	9:00 16:00	7.00	WOR	39		P		M/U 4-1/8" MILL TOOTH BIT, 2 3/8" REG X 2 3/8" EUE BIT SUB, P/U 10 JT 2 3/8" EUE N-80 TBG, TIH W/ 252 JT 2 7/8" N-80 TBG, TAG LINER TOP @ 8,568' R/U DRILL EQUIPMENT, BRAKE CIRC W/80 BBLs APPROX, PUMP 4.5 BPM, RETURN 2.5 BPM MILL ON REMAINS CBP APPROX 1 1/2 HRS, CIRC CLEAN SWIVEL DOWN 5 JT 2 7/8" TAG UP ON REMAINS PLUG @ 8,762' MILL UP LITTLE BIT CBP, WASH DOWN THREW SAND TAG CEMENT @ 8,805' CIRC 1 1/2 BOTTOMS UP LOST APPROX 750 BBLs R/D POWER SWIVEL L/D 3 JT 2 7/8" TOOH W/ 190 JT 2 7/8" EOT @ 2495'
	16:00 16:00	0.00	WOR	18		P		CLOSE LOCK PIPE RAMS, CLOSE CSG VAVLES NIGHT CAPS INSTALL TIW VAVLE IN TBG NIGHT CAP ON TOP SDFN
7/22/2016	6:00 7:30	1.50	WOR	28		P		HELD SAFETY MEETING JSA RUN PRODUCTION
	7:30 8:30	1.00	WOR	39		P		TSP1 150, CSIP 150, CHECK ALL IGNITION SOURCE BLEED WELL OFF BACK TO FLOW BACK TANKS, OPEN WELL UP CONT TOOH W/ 66 jt 2 7/8" N-80 TBG, X/O, 10 JT 2 3/8", BIT SUB, 4-1/8" MILL TOOTH BIT,
	8:30 10:30	2.00	WOR	39		P		M/U 5-3/4" SOLID NO/GO, 2 JT 2 7/8" MUD JTS, 5-1/2" PBGA, 2' X 2 7/8" PUP, 4' X 2 7/8" PUP JT, 2' X 2 7/8" PUP JT, MECH PSN, TBG PUMP BARREL, 4' X 2 7/8" PUP JT, 4 JT 2 7/8" N-80 TBG, 7" KLX TAC, TIH W/ 250 JT 2 7/8" N-80 TBG
	10:30 16:00	5.50	WOR	16		P		SET & TEST TAC, LAND TBG ON 7 1/16" HANGER W/ TIW VAVLE IN PUP JT, N/D 7-1/16" HYDRILL, 7-1/16 BOP, 5K X 10K SPOOL, 10K MAN FRAC VAVLE, M/U "B" FLANGE, INSTALL 60' X 1/4" CHEMICAL LINE R/U FLOW LINES RADIGINS, FLOW "T"
	16:00 18:00	2.00	MIRU	01		P		ROAD RIG TO THE WINSLOW 4-1C5 MIRU SDFN
7/23/2016	6:00 7:00	1.00	INARTLT	28		P		MOVE RIG TO LOCATION. HOLD SAFETY MEETING ON RIG OPERATIONS. FILL OUT & REVIEW JSA
	7:00 8:30	1.50	INARTLT	06		P		FLUSH TBG W/ 60 BBLs 2% KCL WTR. DROP STANDING VALVE. PUMP 48 BBLs 2% KCL WTR & ROD CHEMICAL.

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	8:30 17:00	8.50	INARTLT	18		P		RIH W/ PLUNGER, 1800' #6 COROD. WELD COROD. RIH W/ 4016' # 4 COROD. LD 4016' #4 COROD. WELD COROD. RIH W/1510' # 5 COROD, 1241' # 6 COROD & 1045' #7 COROD. PREP TO WELD COROD. SDFN
7/24/2016	6:00 7:00	1.00	INARTLT	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON DAILY OPERATIONS. FILL OUT & REVIEW JSA
	7:00 11:00	4.00	INARTLT	39		P		WELD ON # 8 COROD. RIH W/ # 8 COROD. WELD ON PIN. SPACE OUT COROD W/ 8',6',2-4', 2' X 1" PONY RODS & 1-1/2" X 40' POLISH ROD. FILL TBG W/ 5 BBLs 2% KCL WTR. STROKE TEST PUMP TO 1000 PSI. TESTED GOOD.
	11:00 14:00	3.00	INARTLT	18		P		RD RIG. SLIDE UNIT. REPAIR DRIVE. START PUMPING UNIT & TURN WELL OVER TO LEASE OPERATOR