



Departure Energy Services (US) LP

End of Well Report

Laramie Energy II, LLC

Well Name : Honea Federal 24-09C

Location : Sec 24-T7S-R93W

Field : Wildcat

API : 05-045-19930-00

Permit :

DES JOB# : 310016

Job Information

Departure Energy Services (US) LP

Client: Laramie Energy II, LLC
 Well Name: Honea Federal 24-09C
 Location: Sec 24-T7S-R93W
 Job Number: 310016
 Well Type: S Well
 Field: Wildcat
 API: 05-045-19930-00
 Permit:

Start Date: 12-Oct-10
 End Date: 30-Oct-10

Departure Cell Phone: 970-379-5595

PersonnelOperator PersonnelPhone Number

Kelly Claussen 970-208-8205
 Cory Claussen 970-208-8205

Directional Personnel

Lloyd Berard
 Lee Douet
 Gordon Peck

Survey Personnel

Matt Ackerman (Kambi)
 Ewert Munoz (Kambi)

Rig Information

Rig Name: Precision 706

Rig Type: Triple ☐ TopDrive

<u>Tubular Type</u>	<u>Size / Connection</u>	<u>Ground and RKB Level (Feet)</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Stroke</u>	<u>Liner</u>	<u>OutPut</u>
DC	6.250 " 4 1/2 X/H	Correct Ground Level: 8563.00	Cont-Emsco	BF-1300	12	6	4.1 gal/stk
HWDP	4.500 " 4 1/2 XH	RKB to Ground Height: 21.00	Cont-Emsco	BF-1300	12	6	4.1 gal/stk
Drill Pipe	4.500 " 4 1/2 XH	Total RKB: 8584.00					
HWDP							
Drill Pipe							

Proposed Well Profile ParametersDirectional

Hole Size : 14.75"
 KOP : 300.00
 TD : 10,963.00
 BUR : 2.00°
 Max DL : 3.50°
 Mag Dec : 10.37°

Target : MD : 8,755.25
 TVD : 8,341.00
 Inc :
 Direction : 226.52°
 Vertical Section : 2,230.23
 N / S : -1,534.69
 E / W : -1,618.23

Primary Zone :

Build Section

Hole Size :
 KOP :
 Casing Point :
 BUR :
 Max DL :
 Mag Dec :

Target : MD :
 TVD :
 Inc :
 Dir :
 V / S :
 N / S :
 E / W :

Primary Zone :

HorizontalLateral Section

Hole Size :

	Leg #1	Leg #2	Leg #3	Leg #4
MD :				
TVD :				
Inc :				
Dir :				
V / S :				
N / S :				
E / W :				

Re-Entry Data

Top of Window :
 Bottom of Window :

Direction :
 Rat Hole :

End Of Well Report



Departure Energy Services (US) LP

Client: Laramie Energy II, LLC
 Well Name: Honea Federal 24-09C
 Rig Name: Precision 706 Location: Sec 24-T7S-R93W
 Job Number: 310016
 Start Date: 12-Oct-10 End Date: 30-Oct-10

Personnel

Operator Personnel

Kelly Claussen
Cory Claussen

Directional Personnel

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Lee Douet
Gordon Peck

Survey Personnel

Matt Ackerman (Kambi)
Ewert Munoz (Kambi)

Build Section

Start Depth:	61	TD:	2,546	Total Feet Drilled:	2,485	Total Drilling Hrs:	59.42	AVG ROP:
# Days:	3	# Bits:	2	# BHA's Used:	2	# Motors Used:	1	41.82

Tangent/ Drop Section

Start Depth:	2,546	TD:	7,200	Total Feet Drilled:	4,654	Total Drilling Hrs:	96.00	AVG ROP:
# Days:	4.25	# Bits:	1	# BHA's Used:	1	# Motors Used:	1	48.48

Vertical Section

Start Depth:	7,200	TD:	11,065	Total Feet Drilled:	3,865	Total Drilling Hrs:	107.00	AVG ROP:
# Days:	11.75	# Bits:	1	# BHA's Used:	1	# Motors Used:	1	36.12

Start Depth:		TD:		Total Feet Drilled:		Total Drilling Hrs:		AVG ROP:
# Days:		# Bits:		# BHA's Used:		# Motors Used:		

Start Depth:		TD:		Total Feet Drilled:		Total Drilling Hrs:		AVG ROP:
# Days:		# Bits:		# BHA's Used:		# Motors Used:		

Total Well Information

TOTAL FEET DRILLED INCLUDING ALL LEGS: 11,004			Total Drilling Hrs: 262.42	AVG ROP:
# Days: 19	# Bits: 4	# BHA's Used: 4	# Motors Used: 3	42.14

Actual Bottom Hole Coordinates

Vertical Section	Build Sections	Lateral Sections
HOLE SIZE: 7.88" KICK OFF POINT: 7200 ICP Coordinates MD: 11065.00 INC: 2.10° DIR: 218.00° TVD: 10594.35 N / S: -1543.15 E / W: -1644.89 V / S: 2255.40	HOLE SIZE: 14.75" WHIPSTOCK SET @: End of Build Coordinates MD: 2546.00 INC: 25.50° DIR: 226.40° TVD: 2372.45 N / S: -423.61 E / W: -486.07 V / S: 644.19	<div style="display: flex; justify-content: space-between;"> <div> Hz Section - Leg #1 HOLE SIZE: WHIPSTOCK SET @: TD Coordinates MD: INC: DIR: TVD: N / S: E / W: V / S: </div> <div> Hz Section - Leg #2 HOLE SIZE: WHIPSTOCK SET @: TD Coordinates MD: INC: DIR: TVD: N / S: E / W: V / S: </div> <div> Hz Section - Leg #4 HOLE SIZE: WHIPSTOCK SET @: TD Coordinates MD: INC: DIR: TVD: N / S: E / W: V / S: </div> </div>

Directional Comments

MWD Comments

Operator Comments



Departure Energy Services (US) LP

Evaluation Reports

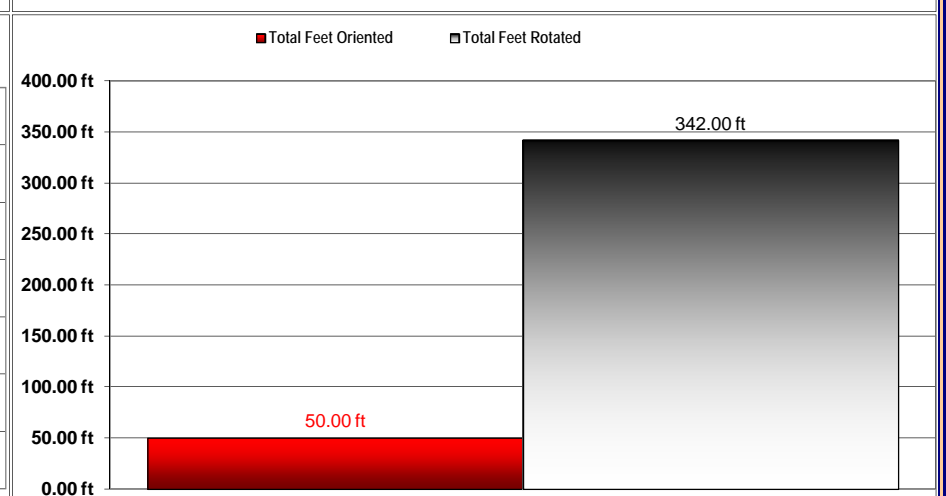
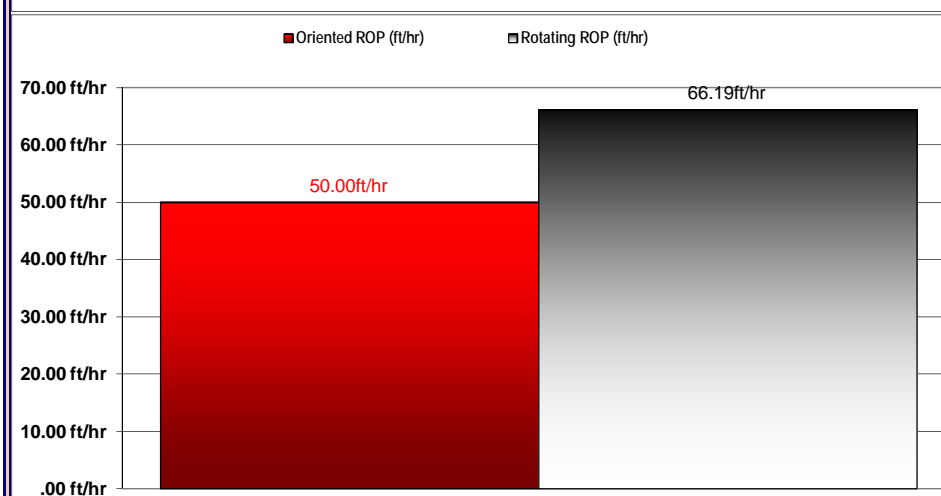
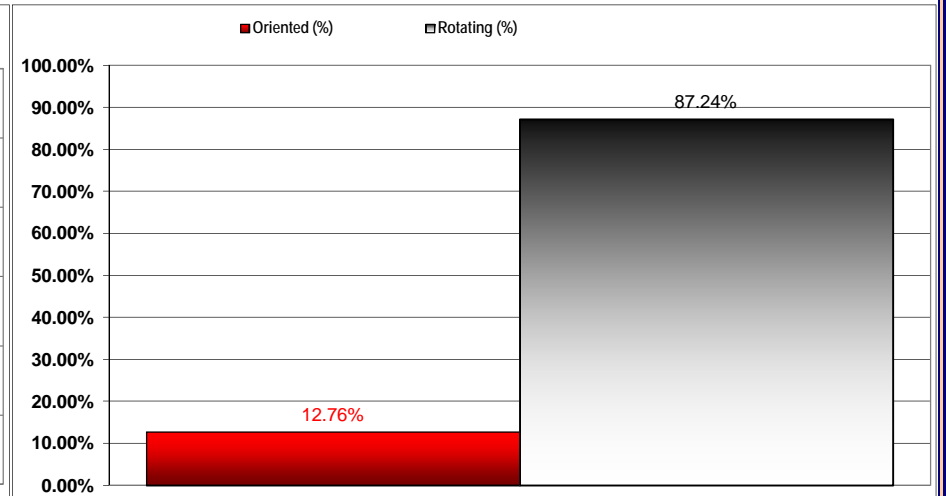
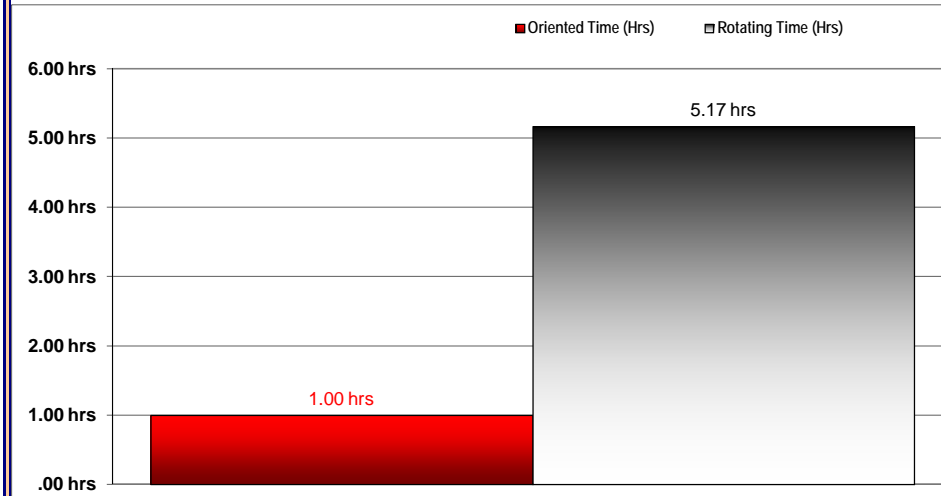
Departure Energy Services

PERFORMANCE EVALUATION WORKSHEET

Customer: Laramie Energy II, LLC
Well Name: Honea Federal 24-09C
Location: Sec 24-T7S-R93W
Profile type: 14.75" build

Run Start Depth: 61.00 ft
Run End Depth: 457.00 ft
Interval (ft): 396.00 ft

Run	Start Depth (ft)	End Depth (ft)	Total Drilling Time	Oriented Time (Hrs)	Oriented (%)	Oriented ROP (ft/hr)	Total Feet Oriented	Rotating Time (Hrs)	Rotating (%)	Rotating ROP (ft/hr)	Total Feet Rotated	Avg WOB Sliding (lbs.k)	Avg WOB Rotating (lbs.k)	Avg Flow Rate (gpm)	Bit Type
1	61	457	.26 days	1.00 hrs	12.76%	50.00	50.00	5.17 hrs	87.24%	66.19	342.00	23.33	25.00	707.50	E BXT125



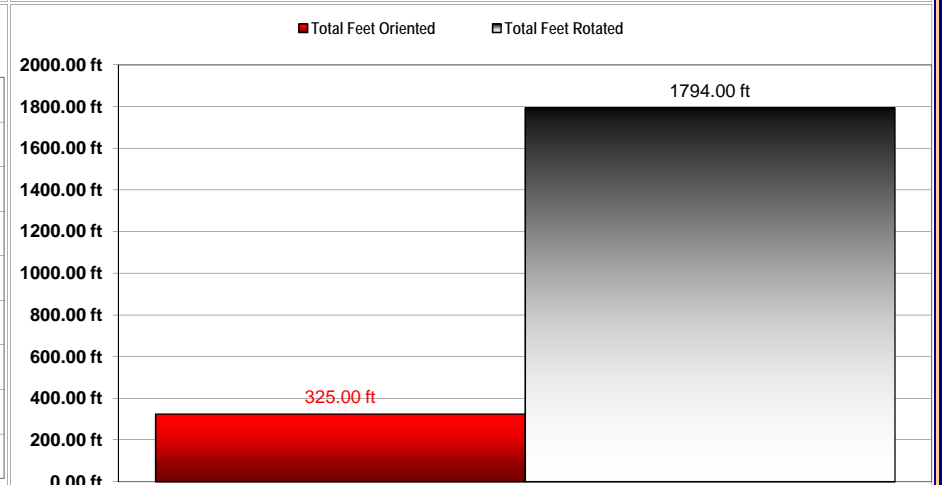
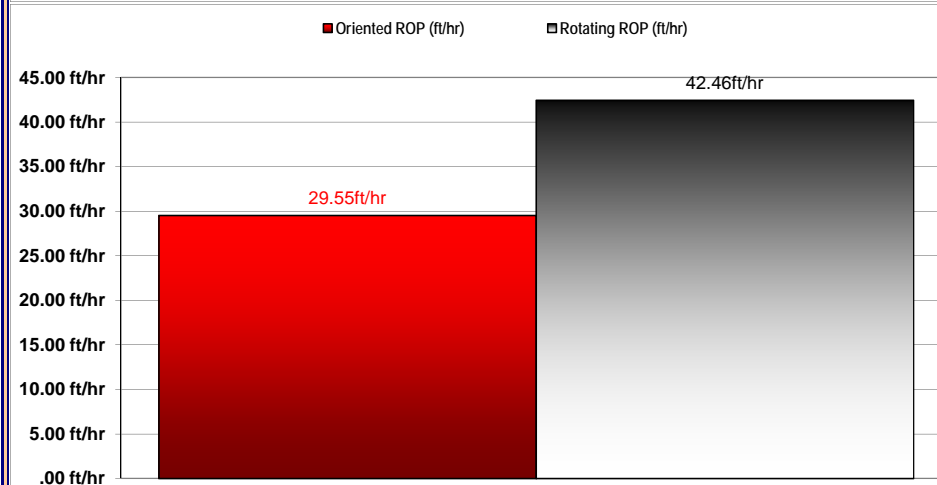
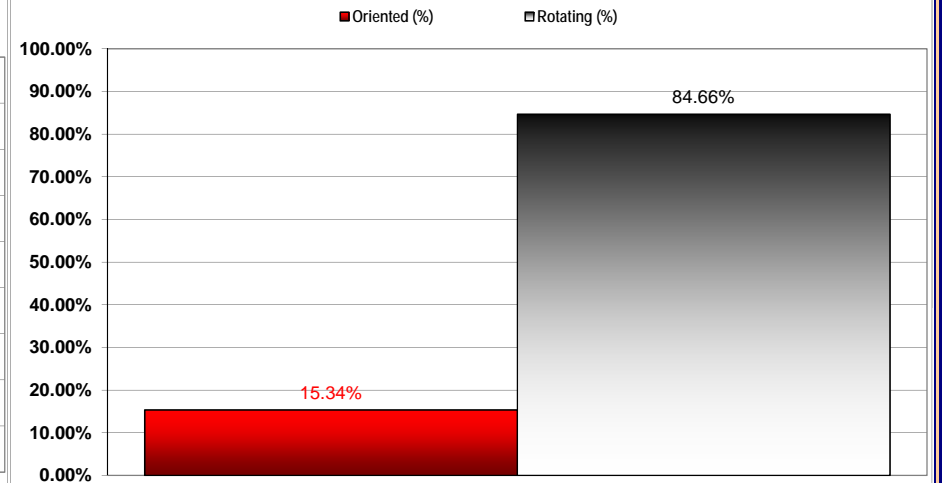
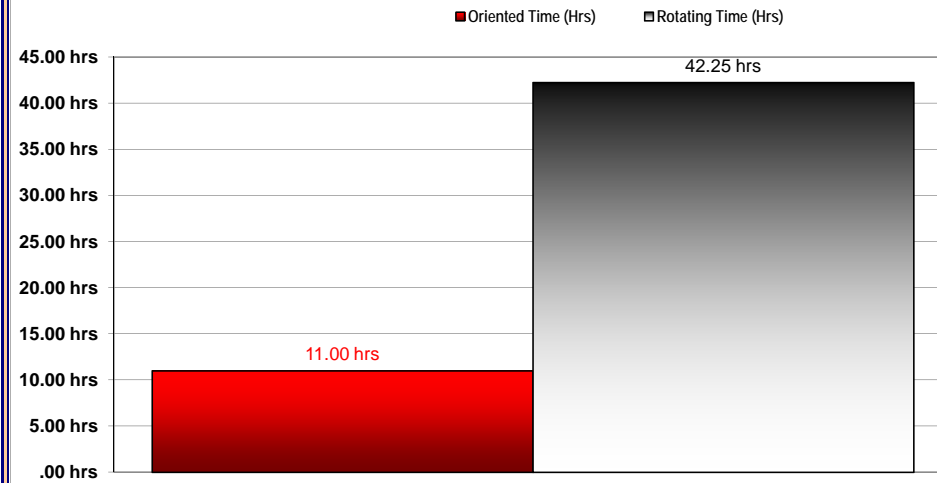
Departure Energy Services (US) LP

PERFORMANCE EVALUATION WORKSHEET

Customer: Laramie Energy II, LLC
Well Name: Honea Federal 24-09C
Location: Sec 24-T7S-R93W
Profile type: 14.75" Build

Run Start Depth: 457.00 ft
Run End Depth: 2546.00 ft
Interval (m): 2089.00 ft

Run	Start Depth (ft)	End Depth (ft)	Total Drilling Time	Oriented Time (Hrs)	Oriented (%)	Oriented ROP (ft/hr)	Total Feet Oriented	Rotating Time (Hrs)	Rotating (%)	Rotating ROP (ft/hr)	Total Feet Rotated	Avg WOB Sliding (lbs.k)	Avg WOB Rotating (lbs.k)	Avg Flow Rate (gpm)	Bit Type
2	457	2546	2.22 days	11.00 hrs	15.34%	29.55	325.00	42.25 hrs	84.66%	42.46	1794.00	21.78	23.70	662.50	FM3753Z



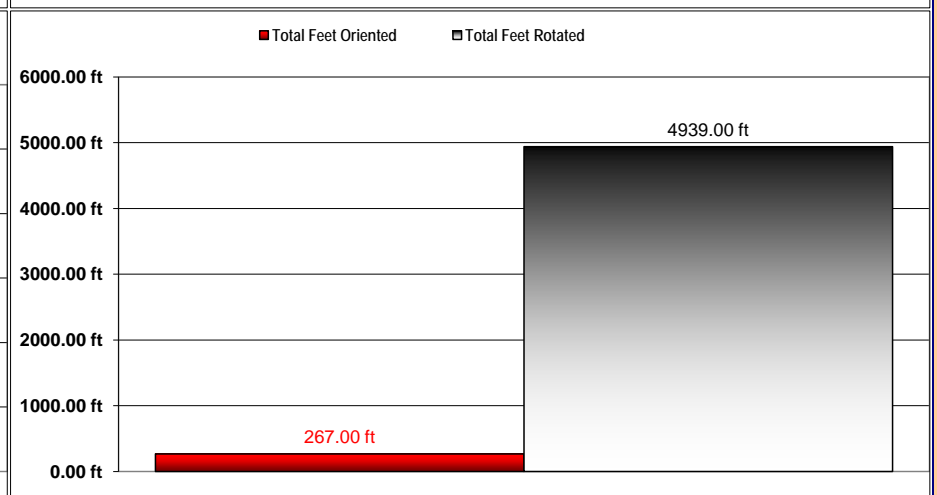
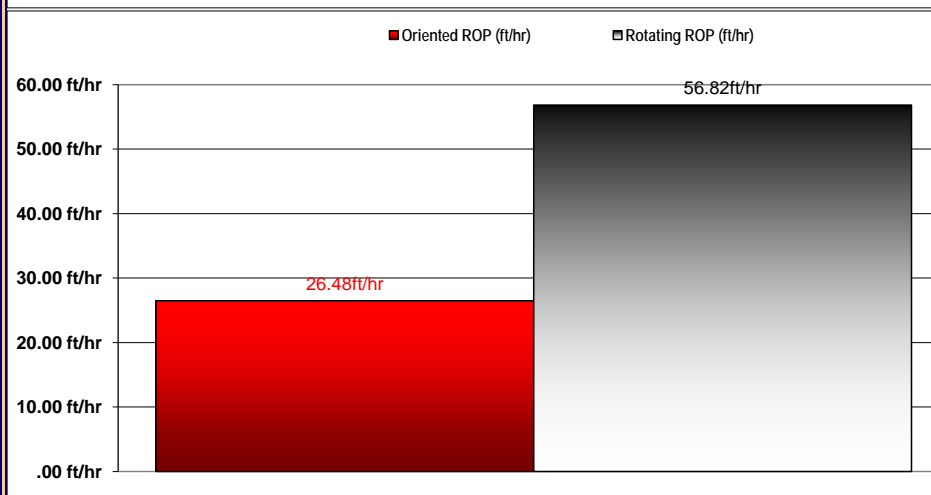
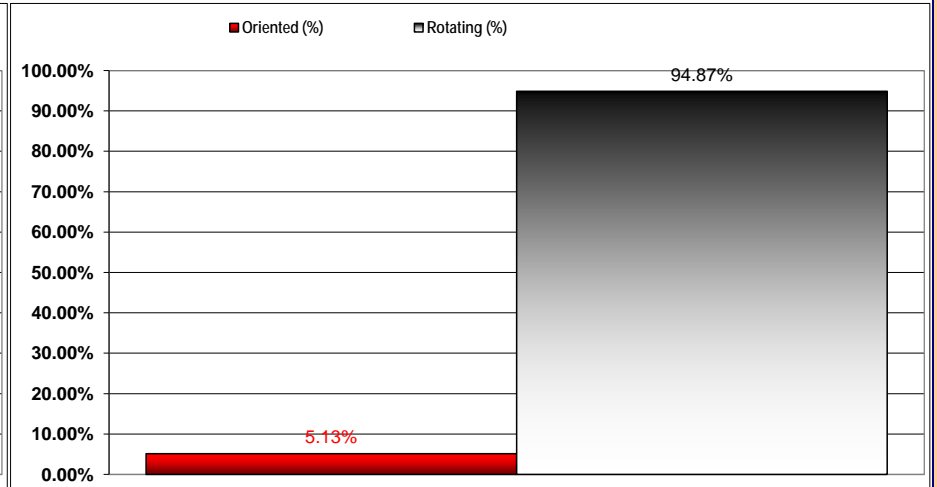
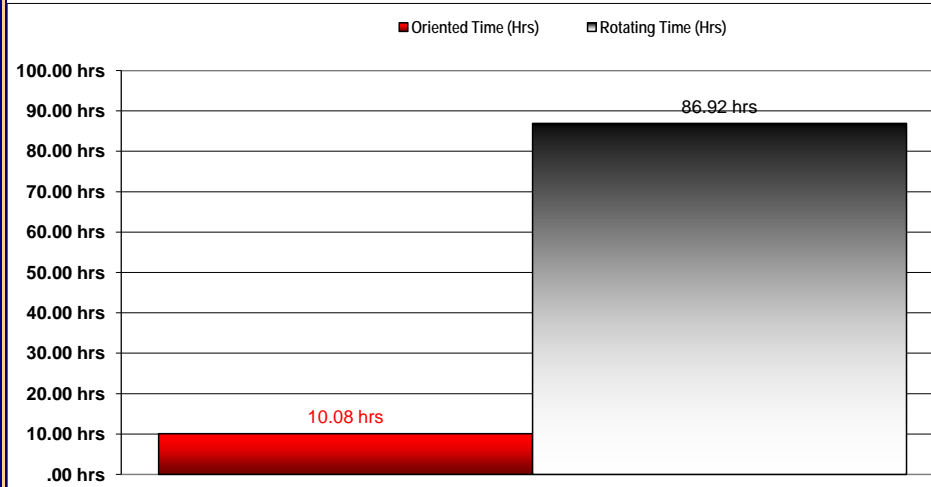
Departure Energy Services (US) LP

PERFORMANCE EVALUATION WORKSHEET

Customer: Laramie Energy II, LLC
Well Name: Honea Federal 24-09C
Location: Sec 24-T7S-R93W
Profile type: 7.875" Tangent/Hold/Drop

Run Start Depth: 2546.00 ft
Run End Depth: 7799.00 ft
Interval (ft): 5253.00 ft

Run	Start Depth (ft)	End Depth (ft)	Total Drilling Time	Oriented Time (Hrs)	Oriented (%)	Oriented ROP (ft/hr)	Total Feet Oriented	Rotating Time (Hrs)	Rotating (%)	Rotating ROP (ft/hr)	Total Feet Rotated	Avg WOB Sliding (lbs.k)	Avg WOB Rotating (lbs.k)	Avg Flow Rate (gpm)	Bit Type
3	2546	7799	4.04 days	10.08 hrs	5.13%	26.48	267.00	86.92 hrs	94.87%	56.82	4939.00	19.50	19.77	439.29	FX56M



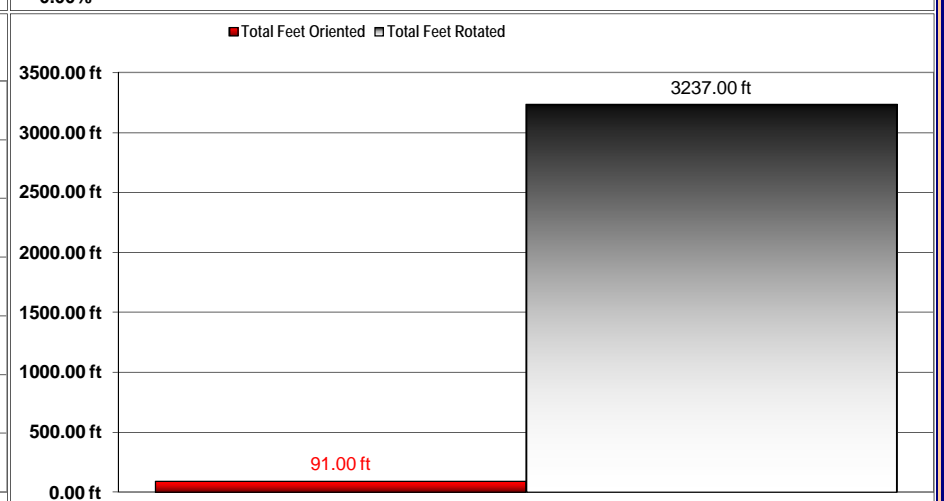
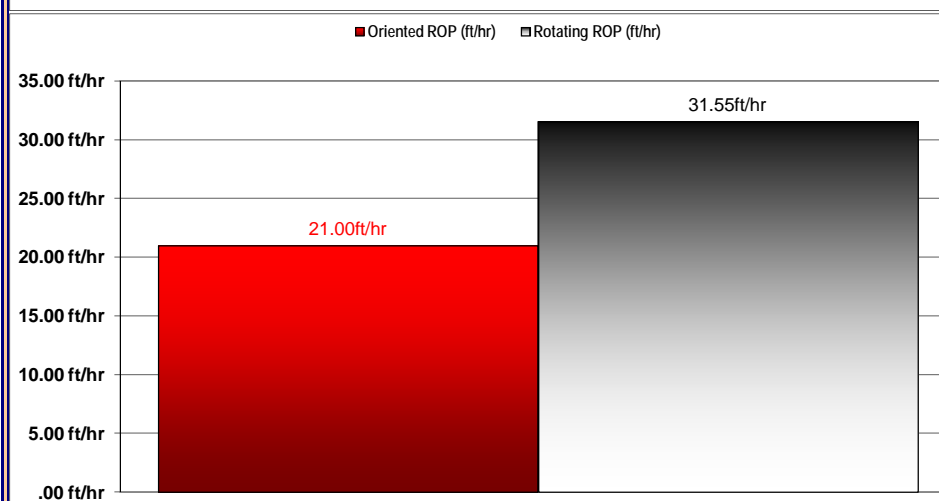
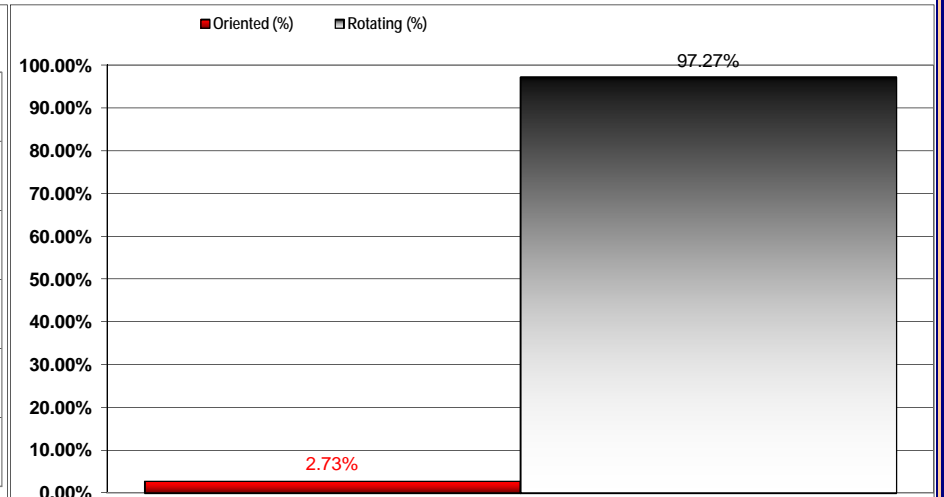
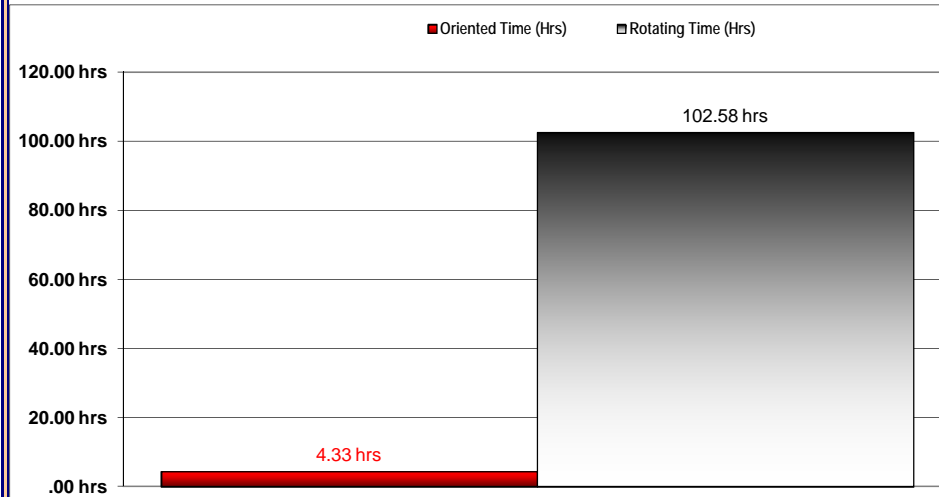
Departure Energy Services (US) LP

PERFORMANCE EVALUATION WORKSHEET

Customer: Laramie Energy II, LLC
Well Name: Honea Federal 24-09C
Location: Sec 24-T7S-R93W
Profile type: 7.785" Hold

Run Start Depth: 7799.00 ft
Run End Depth: 11065.00 ft
Interval (ft): 3266.00 ft

Run	Start Depth (ft)	End Depth (ft)	Total Drilling Time	Oriented Time (Hrs)	Oriented (%)	Oriented ROP (ft/hr)	Total Feet Oriented	Rotating Time (Hrs)	Rotating (%)	Rotating ROP (ft/hr)	Total Feet Rotated	Avg WOB Sliding (lbs.k)	Avg WOB Rotating (lbs.k)	Avg Flow Rate (gpm)	Bit Type
4	7799	11065	4.45 days	4.33 hrs	2.73%	21.00	91.00	102.58 hrs	97.27%	31.55	3237.00	24.17	26.23	440.00	FX54M





Departure Energy Services (US) LP

14.75" Hole Section

1



Jar Specifications	Make:	Up:	Down:	Delay:
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Survey and Drilling Parameters

Customer :	Laramie Energy II, LLC	Motor S/N :	MM 800-006	Bit Manufacturer :	Security	Tie On Survey Depth :	0.00	VS Direction :	226.52°
Well :	Honea Federal 24-09C	Size :	7.94 "	Model :	E BXT125	Inc :	0.00°	Target TVD :	2,500.00
Location :	Sec 24-T7S-R93W	Motor Configuration :	7/8 4.0 Stg	IADC Type :		Az :	0.00°	Target Angle :	22.50°
Rig :	Precision 706	Pad / Stab Size :		Jets / TFA :	3 x 24/32nds	TVD :	0.00	ProbeTo Bit :	55.00 ft
Total RKB :	8,584.00	Bend Setting:	7.08 ft @ 2.12°	Depth In :	61 457	N / S :	0.00	Gamma To Bit :	
KB To Ground :	21.00	Motor Run # :	1	Feet Drilled :	396 ft	E / W :	0.00	Mag Dec :	10.37°
		Mud Type :	LSND			VS :	0.00		
BHA # :	1	Hole Section :	14.75" build						

Bit Depth	Survey Depth	INC (DEG)	AZ (DEG)	Course Length	N / S (ft)	E / W (ft)	TVD (ft)	V/S (ft)	DLS (100ft)	ft / Set	ft / Rot	% Rotary	% Set	Hrs Set	Hrs Rot	TFO	Rotary RPM	WOB		Flow Rate	SPP Pressure		Rotary Torque	String Weight		
												87.24	12.76	1.00	5.17			Slide	Rot		Off	On		Wt	P/up	S/off
55.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	Tie On																	
150.00	95.00	0.8	234.3	95.00	-0.39	-0.54	95.00	0.66	0.84		95.00				60		50		25.0	700.00	1,100	1,200		30	30	30
243.00	188.00	0.8	239.1	93.00	-1.10	-1.62	187.99	1.93	0.07		93.00		0.00		60		50		25.0							
336.00	281.00	1.3	280.0	93.00	-1.25	-3.22	280.97	3.20	0.94	20.00	73.00	243.00	263.00	15	100	220m	50	20.0	25.0							
427.00	372.00	2.0	283.2	91.00	-0.71	-5.78	371.93	4.68	0.78	10.00	81.00	336.00	346.00	15	90	145m	50	20.0	25.0	715.00	1,325	1,525		55	55	55

2



Jar Specifications	Make:	Up:	Down:	Delay:
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Customer : Laramie Energy II, LLC
 Well : Honea Federal 24-09C
 Location : Sec 24-T7S-R93W
 Rig : Precision 706
 Total RKB : 8,584.00
 KB To Ground : 21.00

Motor S/N : MM 800-006
 Size : 7.94 "
 Motor Configuration : 7/8 4.0 Stg
 Pad / Stab Size :
 Bend Setting: 7.08 ft @ 2.12"
 Motor Run # : 2
 Mud Type : LSND

Bit Manufacturer : Security
 Model : FM3753Z
 IADC Type :
 Jets / TFA : 6x16's/ 1x14
 Depth In : 457 2,546 : Out
 Feet Drilled : 2089 ft

Tie On Survey Depth : 372.00
 Inc : 2.00°
 Az : 283.20°
 TVD : 371.93
 N / S : -0.71
 E / W : -5.78
 VS : 4.68

VS Direction : 226.52°
 Target TVD : 2,500.00
 Target Angle : 22.50°
 Probe To Bit : 55.00 ft
 Gamma To Bit :
 Mag Dec : 10.37°

BHA # : 2 Hole Section : 14.75* Build

% Rotary 84.66 % Set 15.34 Hrs Set 11.00 Hrs Rot 42.25

Bit Depth	Survey Depth	INC (DEG)	AZ (DEG)	Course Length	N / S (ft)	E / W (ft)	TVD (ft)	V/S (ft)	DLS (100ft)	ft / Set	ft / Rot	Orient Start	Orient End	Actual Min Set	Actual Min	TFO	Rotary RPM	WOB Slide	Rot	Flow Rate	SPP Pressure Off	SPP Pressure On	Rotary Torque	String Weight		
																							Wt	P/up	S/off	
427.00	372.00	2.00	283.20		-0.71	-5.78	371.93	4.68	Tie On																	
517.00	462.00	3.4	268.3	90.00	-0.43	-9.98	461.83	7.54	1.73	20.00	70.00	427.00	447.00	30	40	170M	40	30.0	25.0	750.00	1,750	1,900		55	55	55
608.00	553.00	4.8	247.7	91.00	-1.96	-16.20	552.60	13.10	2.21	35.00	56.00	517.00	552.00	40	25	200M	40	18.0	20.0							
700.00	645.00	6.4	223.3	92.00	-7.15	-23.28	644.17	21.81	3.08	30.00	62.00	608.00	638.00	35	40	100L	40	18.0	20.0							
792.00	737.00	8.4	222.5	92.00	-15.84	-31.33	735.40	33.63	2.18	10.00	82.00	700.00	710.00	10	50	HS	40	18.0	20.0							
883.00	828.00	10.3	225.9	91.00	-26.40	-41.67	825.19	48.40	2.17	15.00	76.00	792.00	807.00	15	45	20R	40	18.0	20.0	750.00	1,850	2,050		70	75	60
974.00	919.00	12.5	227.6	91.00	-38.70	-54.78	914.39	66.38	2.45	18.00	73.00	883.00	901.00	20	45	HS	40	18.0	20.0							
1,069.00	1,014.00	14.5	226.8	95.00	-53.78	-71.05	1,006.76	88.56	2.11	16.00	79.00	974.00	990.00	25	60	10L	40	18.0	20.0							
1,164.00	1,109.00	16.0	227.5	95.00	-70.77	-89.37	1,098.41	113.54	1.59	16.00	79.00	1,069.00	1,085.00	30	80	HS	40	18.0	20.0							
1,260.00	1,205.00	17.0	228.9	96.00	-88.93	-109.70	1,190.45	140.79	1.12	22.00	74.00	1,164.00	1,186.00	30	70	HS	40	20.0	20.0	700.00	1,850	2,150		75	80	70
1,355.00	1,300.00	18.1	229.7	95.00	-107.60	-131.42	1,281.03	169.41	1.19	22.00	73.00	1,260.00	1,282.00	20	80	20L	40	18.0	20.0							
1,450.00	1,395.00	20.0	226.9	95.00	-128.25	-154.54	1,370.83	200.39	2.22	20.00	75.00	1,355.00	1,375.00	35	65	40L	40	22.0	20.0							
1,546.00	1,491.00	21.9	226.1	96.00	-151.89	-179.43	1,460.48	234.71	2.00	15.00	81.00	1,450.00	1,465.00	40	100	20L	40	20.0	20.0							
1,641.00	1,586.00	23.2	227.5	95.00	-176.81	-206.00	1,548.21	271.14	1.48		95.00				165		40		20.0	600.00	1,600	1,800		80	85	75
1,736.00	1,681.00	24.1	228.6	95.00	-202.28	-234.34	1,635.23	309.23	1.06	4.00	91.00	1,641.00	1,645.00	20	200	130L	40	22.0	20.0	520.00	1,250	1,500				
1,831.00	1,776.00	23.5	230.5	95.00	-227.16	-263.51	1,722.15	347.51	1.02		95.00				230		40		20.0							
1,926.00	1,871.00	23.6	232.9	95.00	-250.68	-293.29	1,809.24	385.31	1.01		95.00				200		40		25.0							
2,022.00	1,967.00	24.9	231.5	96.00	-274.85	-324.43	1,896.77	424.54	1.48	12.00	84.00	1,926.00	1,938.00	40	95	100L	40	25.0	25.0	660.00	2,100	2,400		85	90	80
2,117.00	2,062.00	25.6	228.3	95.00	-300.96	-355.41	1,982.70	464.98	1.61	24.00	71.00	2,022.00	2,046.00	70	80	130L	40	25.0	30.0							
2,212.00	2,157.00	24.8	227.2	95.00	-328.15	-385.35	2,068.66	505.42	0.98	19.00	76.00	2,149.00	2,168.00	60	150	140L	40	28.0	30.0							
2,308.00	2,253.00	24.3	226.4	96.00	-355.45	-414.43	2,155.98	545.30	0.63	22.00	74.00	2,212.00	2,234.00	90	170	130L	40	28.0	30.0							
2,403.00	2,348.00	24.1	226.7	95.00	-382.23	-442.70	2,242.63	584.24	0.25	5.00	90.00	2,308.00	2,313.00	50	160	100L	40	28.0	30.0	660.00	2,200	2,425		85	90	80
2,498.00	2,443.00	25.0	226.1	95.00	-409.45	-471.28	2,329.04	623.72	0.98		95.00				240		40		35.0							
2,546.00	2,491.00	25.5	226.4	48.00	-423.61	-486.07	2,372.45	644.19	1.08		48.00				145		40		35.0	660.00	2,275	2,475		96	100	92

Mud Motor Report

1



Company : Laramie Energy II, LLC

Job No : 310016

Location : Sec 24-T7S-R93W

Well Name : Honea Federal 24-09C

Departure Energy Services (US) LP

Rig# : Precision 706

Directional Driller(s) : Lloyd Berard
Lee Douet

Data

Serial Number : MM 800-006

Previous Run Job# Run Hrs :

Size : 7.94 "

Configuration : 7/8 4.0stg

BHA #:	Bend:	Pad/Stab:	Date In:	Date Out:	Depth In:	Depth Out:	Drig Hrs:	Circ Hrs:	Total Run	Total Hrs:	Ave ROP
1	2.12°		12-Oct-10	13-Oct-10	61	457	6.17	1.10	7.27	7.27	64.18
2	2.12°		13-Oct-10	17-Oct-10	457	2546	53.25	22.65	75.90	83.17	39.23

Motor Fail ? : no

Offset pad / Stab size : n/a

Lost Time Hrs : n/a

Tool Performance : 10.00"/100ft

Formations : Wasatch

Parameters

BHA # : 1

Calculated Pressure Drop at the Bit : (Kpa) 284 (PSI)

Well Type : S Well

Weight on Bit : (sliding) 28 (rotating) 35

Adjustable / Fixed Bend '@ : 2.12°

Pump Flow Rate : 660.00

Motor Stalled / # Times : 0

String (Rotary) RPM : 40

Times Jarred Up (Estimate) : 0

String (Rotary) Torque :

Times Jarred Down (Estimate) : 0

Average Differential : 200 psi

Mud Properties

Mud Type : LSND

Oil % / Water % : 86.3

DownHole Temp: 132.8 (°F)

Mud Weight : 10.4

(Attach mud report, if available)

PV : 65

from MWD tool

Viscosity : 65

YP : 30

Fluid Loss : 6.8

Solids Content : 13.7

pH : 7.8

Sand Content : 0.7

Additives : Caustic, Pac Lv, Lignite, Desco

Comments of Motor Run / Detailed Description of Events Leading to Failure

TIH with 14 3/4" Security EBXT 125 Tric-Cone, DES 8" 7/8 4.0 stg PDM, and Kambi EM Tool.
Drilled a total of 396' with Tricone bit through boulders. TOOH @ 457' MD to pick up PDC bit.

For second run TIH with 14 3/4" Security FM3753Z PDC, DES 8" 7/8 4.0 stg PDM, and Kambi EM Tool.
Drill a total of 2089' with PDC to 2546' MD. TOOH for Surface CSG.

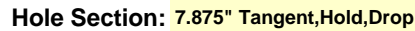
Motor performed well on both runs. Numerous stalls when drilling with 500 gpm and several pressure spikes. We were limited to 500 - 660 GPM for most of the well due to pop-off valve issues on #2 pump. Once above the rotary motor checked out ok.



Departure Energy Services (US) LP

7.875" Hole Section

3



Jar Specifications	Make:	Up:	Down:	Delay:
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Departure Energy Services (US) LP

Survey and Drilling Parameters

Customer :	Laramie Energy II, LLC	Motor S/N :	MM 650-001	Bit Manufacturer :	Security	Tie On Survey Depth :	2,491.00	VS Direction :	226.52°
Well :	Honea Federal 24-09C	Size :	6.56 "	Model :	FX56M	Inc :	25.50°	Target TVD :	10,549.00
Location :	Sec 24-T7S-R93W	Motor Configuration :	7/8 2.9 Stg	IADC Type :		Az :	226.40°	Target Angle :	0.00°
Rig :	Precision 706	Pad / Stab Size :		Jets / TFA :	5 x 16/32nds	TVD :	2,372.46	ProbeTo Bit :	55.00 ft
Total RKB :	8,584.00	Bend Setting:	6.07 ft @ 1.50°	Depth In :	2,546 7,799	N / S :	-423.61	Gamma To Bit :	
KB To Ground :	21.00	Motor Run # :	1	Feet Drilled :	5253 ft	E / W :	-486.08	Mag Dec :	10.37°
		Mud Type :	LSND			VS :	644.19		
BHA # :	3	Hole Section :	7.875" Tangent/Hold/Drop						

												% Rotary	% Set	Hrs Set	Hrs Rot												
												94.87	5.13	10.08	86.92												
Bit Depth	Survey Depth	INC (DEG)	AZ (DEG)	Course Length	N / S (ft)	E / W (ft)	TVD (ft)	V/S (ft)	DLS (100ft)	ft / Set	ft / Rot	Orient Start	Orient End	Actual Min Set	Actual Min	TFO	Rotary RPM	WOB Slide	Rot	Flow Rate	SPP Pressure Off	On	Rotary Torque	String Weight			
																							Wt	P/up	S/off		
2,546.00	2,491.00	25.50	226.40		-423.61	-486.08	2,372.46	644.19	Tie On																		
2,621.00	2,566.00	26.0	226.3	75.00	-446.10	-509.66	2,440.01	676.78	0.67		75.00				45		30		12.0	430.00	1,650	1,900		93	93	93	
2,684.00	2,629.00	25.7	226.1	63.00	-465.11	-529.48	2,496.71	704.25	0.50		63.00				25		30		12.0								
2,780.00	2,725.00	25.3	225.7	96.00	-493.87	-559.16	2,583.36	745.57	0.45		96.00				55		30		15.0								
2,875.00	2,820.00	24.3	224.6	95.00	-521.97	-587.42	2,669.59	785.41	1.16		95.00				50		30		18.0								
2,970.00	2,915.00	24.4	223.7	95.00	-550.07	-614.70	2,756.14	824.54	0.40	8.00	87.00	2,875.00	2,883.00	10	60	25R	30	20.0	18.0	430.00	1,600	1,900		95	95	95	
3,065.00	3,010.00	24.6	225.5	95.00	-578.12	-642.36	2,842.59	863.91	0.81	10.00	85.00	2,970.00	2,980.00	10	45	60R	30	20.0	18.0								
3,161.00	3,106.00	24.8	225.9	96.00	-606.14	-671.07	2,929.81	904.02	0.27	8.00	88.00	3,065.00	3,073.00	10	45	30R	30	20.0	18.0								
3,256.00	3,201.00	23.9	224.8	95.00	-633.66	-698.94	3,016.36	943.18	1.06		95.00				45		30		20.0								
3,352.00	3,297.00	24.8	227.6	96.00	-661.03	-727.51	3,103.82	982.75	1.52	10.00	86.00	3,256.00	3,266.00	10	40	50R	30	20.0	20.0	440.00	1,775	1,975		98	122	95	
3,447.00	3,392.00	24.4	226.2	95.00	-688.05	-756.39	3,190.20	1,022.29	0.74		95.00				50		30		20.0								
3,542.00	3,487.00	24.7	225.2	95.00	-715.62	-784.63	3,276.61	1,061.76	0.54	6.00	89.00	3,447.00	3,453.00	10	45	HS	30	15.0	20.0								
3,637.00	3,582.00	24.4	226.8	95.00	-743.04	-813.02	3,363.02	1,101.23	0.77	6.00	89.00	3,542.00	3,548.00	15	50	45R	30	15.0	20.0								
3,733.00	3,678.00	25.0	226.9	96.00	-770.47	-842.29	3,450.24	1,141.34	0.63	6.00	90.00	3,637.00	3,643.00	10	55	20R	30	15.0	20.0	440.00	1,700	1,900		105	130	85	
3,828.00	3,773.00	24.3	225.5	95.00	-797.89	-870.89	3,536.58	1,180.96	0.96		95.00				50		30		20.0								
3,924.00	3,869.00	24.1	225.5	96.00	-825.47	-898.96	3,624.15	1,220.31	0.21	5.00	91.00	3,828.00	3,833.00	10	50	10R	30	15.0	20.0								
4,019.00	3,964.00	25.0	226.3	95.00	-852.94	-927.30	3,710.56	1,259.77	1.01	6.00	89.00	3,924.00	3,930.00	10	95	15R	30	15.0	20.0								
4,114.00	4,059.00	24.8	225.4	95.00	-880.80	-956.00	3,796.73	1,299.77	0.45		95.00				155		30		20.0	440.00	1,850	2,100		110	135	90	
4,210.00	4,155.00	25.0	224.8	96.00	-909.33	-984.63	3,883.80	1,340.17	0.34		96.00				80		30		20.0								
4,305.00	4,250.00	24.6	223.9	95.00	-937.82	-1,012.49	3,970.04	1,379.99	0.58		95.00				105		30		20.0								
4,400.00	4,345.00	24.5	223.8	95.00	-966.28	-1,039.83	4,056.45	1,419.42	0.11	6.00	89.00	4,305.00	4,311.00	15	60	90R	30	20.0	20.0								
4,496.00	4,441.00	23.9	224.3	96.00	-994.57	-1,067.19	4,144.02	1,458.74	0.66		96.00				55		30		20.0	450.00	1,975	2,250		113	138	95	
4,591.00	4,536.00	23.2	222.8	95.00	-1,022.07	-1,093.35	4,231.10	1,496.64	0.97		95.00				60		30		20.0								
4,686.00	4,631.00	22.9	225.4	95.00	-1,048.78	-1,119.22	4,318.52	1,533.79	1.12	8.00	87.00	4,591.00	4,599.00	20	55	60R	30	20.0	20.0								
4,781.00	4,726.00	22.5	225.4	95.00	-1,074.52	-1,145.33	4,406.16	1,570.45	0.42		95.00				155		30		20.0								
4,877.00	4,822.00	22.6	226.8	96.00	-1,100.05	-1,171.85	4,494.82	1,607.26	0.57	5.00	91.00	4,781.00	4,786.00	30	195	60R	30	20.0	20.0	440.00	1,750	1,900		120	155	100	
4,972.00	4,917.00	23.1	226.6	95.00	-1,125.35	-1,198.70	4,582.37	1,644.15	0.53		95.00				185		30		20.0								
5,068.00	5,013.00	23.0	226.6	96.00	-1,151.17	-1,226.01	4,670.70	1,681.74	0.10		96.00				90		30		20.0								
5,163.00	5,108.00	22.1	225.8	95.00	-1,176.39	-1,252.31	4,758.44	1,718.17	1.00		95.00				80		30		20.0								
5,258.00	5,203.00	21.3	224.5	95.00	-1,201.15	-1,277.21	4,846.71	1,753.28	0.98		95.00				75		30		20.0	440.00	2,000	2,250		132	162	112	
5,354.00	5,299.00	20.6	225.5	96.00	-1,225.43	-1,301.48	4,936.36	1,787.59	0.82	8.00	88.00	5,258.00	5,266.00	20	120	90R	30	20.0	20.0								
5,449.00	5,394.00	20.4	225.7	95.00	-1,248.70	-1,325.25	5,025.34	1,820.86	0.22		95.00				105		30		20.0								
5,544.00	5,489.00	20.0	225.5	95.00	-1,271.65	-1,348.69	5,114.50	1,853.66	0.43		95.00				45		30		20.0								
5,640.00	5,585.00	19.6	224.4	96.00	-1,294.67	-1,371.66	5,204.83	1,886.16	0.57		96.00				55		30		20.0	440.00	2,000	2,250		135	165	115	
5,735.00	5,680.00	18.7	224.4	95.00	-1,316.93	-1,393.47	5,294.57	1,917.30	0.95	10.00	85.00	5,640.00	5,650.00	20	90	170R	30	20.0	20.0								
5,830.00	5,775.00	17.9	225.5	95.00	-1,338.05	-1,414.54	5,384.76	1,947.12	0.92	12.00	83.00	5,735.00	5,747.00	20	85	120R	30	20.0	20.0								
5,925.00	5,870.00	16.3	228.1	95.00	-1,357.18	-1,434.87	5,475.56	1,975.05	1.87	12.00	83.00	5,830.00	5,842.00	25	80	150R	30	20.0	20.0								
6,021.00	5,966.00	14.8	229.0	96.00	-1,374.23	-1,454.16	5,568.05	2,000.76	1.58	8.00	88.00	5,925.00	5,933.00	30	65	170L	30	20.0	20.0	440.00	1,475	1,675		140	190	110	



Customer :	Laramie Energy II, LLC	Motor S/N :	MM 650-001	Bit Manufacturer :	Security	Tie On Survey Depth :	2,491.00	VS Direction :	226.52°
Well :	Honea Federal 24-09C	Size :	6.56 "	Model :	FX56M	Inc :	25.50°	Target TVD :	10,549.00
Location :	Sec 24-T7S-R93W	Motor Configuration :	7/8 2.9 Stg	IADC Type :		Az :	226.40°	Target Angle :	0.00°
Rig :	Precision 706	Pad / Stab Size :		Jets / TFA :	5 x 16/32nds	TVD :	2,372.46	ProbeTo Bit :	55.00 ft
Total RKB :	8,584.00	Bend Setting:	6.07 ft @ 1.50°	Depth In :	2,546 7,799	N / S :	-423.61	Gamma To Bit :	
KB To Ground :	21.00	Motor Run # :	1	Feet Drilled :	5253 ft	E / W :	-486.08	Mag Dec :	10.37°
		Mud Type :	LSND			VS :	644.19		
BHA # :	3	Hole Section :	7.875" Tangent/Hold/Drop						

% Rotary	% Set	Hrs Set	Hrs Rot
94.87	5.13	10.08	86.92

Bit Depth	Survey Depth	INC (DEG)	AZ (DEG)	Course Length	N / S (ft)	E / W (ft)	TVD (ft)	V/S (ft)	DLS (100ft)	ft / Set	ft / Rot	Orient Start	Orient End	Actual Min Set	Actual Min	TFO	Rotary RPM	WOB Slide	Rot	Flow Rate	SPP Pressure Off	On	Rotary Torque	String Weight		
																							Wt	P/up	S/off	
6,116.00	6,061.00	13.4	225.8	95.00	-1,389.86	-1,471.21	5,660.18	2,023.89	1.69	8.00	87.00	6,021.00	6,029.00	25	120	120L	30	20.0	20.0							
6,211.00	6,156.00	13.1	225.3	95.00	-1,405.11	-1,486.75	5,752.65	2,045.67	0.34	5.00	90.00	6,116.00	6,121.00	25	90	170R	30	20.0	20.0							
6,307.00	6,252.00	12.2	224.7	96.00	-1,419.97	-1,501.62	5,846.32	2,066.68	0.95	10.00	86.00	6,211.00	6,221.00	15	75	170R	30	20.0	20.0							
6,402.00	6,347.00	11.5	227.8	95.00	-1,433.47	-1,515.70	5,939.30	2,086.18	1.00	10.00	85.00	6,307.00	6,317.00	15	75	130R	30	20.0	20.0	440.00	1,750	1,975		150	200	120
6,497.00	6,442.00	10.2	228.9	95.00	-1,445.36	-1,529.05	6,032.60	2,104.05	1.39	10.00	85.00	6,402.00	6,412.00	20	160	180	30	20.0	20.0							
6,593.00	6,538.00	9.0	227.1	96.00	-1,456.06	-1,540.96	6,127.25	2,120.06	1.29	10.00	86.00	6,497.00	6,507.00	25	165	160L	30	20.0	20.0							
6,688.00	6,633.00	8.6	226.5	95.00	-1,466.01	-1,551.55	6,221.13	2,134.59	0.43	10.00	85.00	6,593.00	6,603.00	15	90	160L	30	20.0	20.0							
6,784.00	6,729.00	7.0	227.2	96.00	-1,474.92	-1,561.05	6,316.24	2,147.62	1.67	8.00	88.00	6,688.00	6,696.00	25	100	180	30	20.0	20.0	440.00	1,475	1,650		157	205	120
6,879.00	6,824.00	6.8	229.2	95.00	-1,482.53	-1,569.56	6,410.55	2,159.02	0.33		95.00				90		30		20.0							
6,975.00	6,920.00	5.6	223.1	96.00	-1,489.66	-1,577.06	6,505.99	2,169.38	1.42	12.00	84.00	6,879.00	6,891.00	20	75	140L	30	20.0	20.0							
7,070.00	7,015.00	4.8	227.9	95.00	-1,495.71	-1,583.18	6,600.60	2,177.98	0.96	8.00	87.00	6,975.00	6,983.00	15	180	150L	30	20.0	20.0							
7,165.00	7,110.00	3.2	227.9	95.00	-1,500.16	-1,588.09	6,695.37	2,184.60	1.68	12.00	83.00	7,070.00	7,082.00	50	125	160L	30	20.0	20.0	440.00	1,500	1,700		160	220	140
7,260.00	7,205.00	2.9	235.0	95.00	-1,503.31	-1,592.03	6,790.23	2,189.63	0.51		95.00	7,207.00			95		30		20.0							
7,356.00	7,301.00	1.6	245.3	96.00	-1,505.27	-1,595.24	6,886.16	2,193.30	1.41	15.00	81.00	7,207.00	7,222.00	40	195	55m	30	25.0	20.0							
7,451.00	7,396.00	1.7	241.7	95.00	-1,506.49	-1,597.68	6,981.12	2,195.92	0.15		95.00				195		30		20.0							
7,546.00	7,491.00	1.6	249.5	95.00	-1,507.62	-1,600.16	7,076.08	2,198.50	0.26		95.00				120		30		24.0	440.00	1,675	1,875		165	220	135
7,642.00	7,587.00	1.8	235.2	96.00	-1,508.95	-1,602.66	7,172.04	2,201.22	0.49		96.00				120		30		24.0							
7,737.00	7,682.00	1.8	240.5	95.00	-1,510.54	-1,605.18	7,266.99	2,204.15	0.18		95.00				180		30		24.0							

Mud Motor Report

2



Company : Laramie Energy II, LLC

Job No : 310016

Location : Sec 24-T7S-R93W

Well Name : Honea Federal 24-09C

Departure Energy Services (US) LP

Rig# : Precision 706

Directional Driller(s) : Lloyd Berard
Lee Douet

Data

Serial Number : MM 650-001

Previous Run Job# Run Hrs :

Size : 6.56 "

Configuration : 7/8 2.9stg

BHA #:	Bend:	Pad/Stab:	Date In:	Date Out:	Depth In:	Depth Out:	Drig Hrs:	Circ Hrs:	Total Run	Total Hrs:	Ave ROP
3	1.5°		19-Oct-10	24-Oct-10	2546	7799	97.00	12.70	109.70	109.70	54.15

Motor Fail ? : no

Offset pad / Stab size : n/a

Lost Time Hrs : 0.00

Tool Performance : 10.00"/100ft

Formations : Wasatch, Williams Fork

Parameters

BHA # : 3

Calculated Pressure Drop at the Bit : (Kpa) 189 (PSI)

Well Type : S Well

Weight on Bit : (sliding) 18 (rotating) 22

Adjustable / Fixed Bend '@ : 1.50°

Pump Flow Rate : 450.00

Motor Stalled / # Times : 0

String (Rotary) RPM : 30

Times Jarred Up (Estimate) : 0

String (Rotary) Torque :

Times Jarred Down (Estimate) : 0

Average Differential : 200 psi

Mud Properties

Mud Type : LSND

Oil % / Water % : 86.3

DownHole Temp: (°F)

Mud Weight : 9.5

(Attach mud report, if available)

PV : 22

from MWD tool

Viscosity : 51

YP : 21

Fluid Loss : 8

Solids Content : 10

pH : 8

Sand Content : 0.25

Additives : Caustic, Pac LV, Hyperdril, Lignite, Desco, LCM

Comments of Motor Run / Detailed Description of Events Leading to Failure

TIH with a 7 7/8" Security FX56M PDC, DES' 6 1/5" 7/8 2.9 stg PDM and Kambi's EM Tool. Drilled a total of 5253' in 97 drilling hrs (109.7 total circulating hrs).
WOB = 22k , Rotary RPM = 30 , GPM = 450
Motor performed well this run. Once above rotary, motor checked out good.

4

Hole Section: 7.875" Hold

[illegible]

Mud Motor Data

Set @	Vendor	Serial #	Rev / gal	Lobe	Stage	Bit to Bend	Feet	Drill	Circ.	Tot.
1.50	Departure	MM 650-008	0.160	7/8	2.9	6.11	3266	106.00	21.00	127.00

Dump Valve : ☐

Pad / Stabs :

Bit

No	Manufacturer	Type	Nozzles	PDC gauge length	Feet	Hrs	Dull Grade
4	Security	FX54M	5 x 16's		3266	106.00	2-2-CT-A-X-I-WT-TD

Mud

LSND		Solid Control	yes	Vis	61	PV	26	% Solids	3.6
Mud Additives	Gel, Caustic, Pac Lv, Hyperdril, Lignite, Desco			Density	9	YP	26	% Sand	1
				Filtrate	8.0	pH	8.8	% Oil	

BHA Comments

Drilled a total of 3266' in 106 drilling hrs (127 total circ hrs). Drilled with 5 - 15% LCM in system as well as 450 - 650 cfm's of air on backside through parasite string. Had difficulty surveying with EM tool this run. Motor performed well.

WOB = 20 - 30K, Rotary RPM = 30, GPM = 450

Once above rotary motor drained and check out.

Jar Specifications	Make:	Up:	Down:	Delay:
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Customer : Laramie Energy II, LLC
 Well : Honea Federal 24-09C
 Location : Sec 24-T7S-R93W
 Rig : Precision 706
 Total RKB : 8,584.00
 KB To Ground : 21.00

Motor S/N : MM 650-008
 Size : 6.63 "
 Motor Configuration : 7/8 2.9 Stg
 Pad / Stab Size :
 Bend Setting: 6.11 ft @ 1.50°
 Motor Run # : 1
 Mud Type : LSND

Bit Manufacturer : Security
 Model : FX54M
 IADC Type :
 Jets / TFA : 5 x 16's
 Depth In : 7,799 11,065 : Out
 Feet Drilled : 3266 ft

Tie On Survey Depth : 7,682.00
 Inc : 1.80°
 Az : 240.50°
 TVD : 7,266.99
 N / S : -1,510.53
 E / W : -1,605.17
 VS : 2,204.13

VS Direction : 226.52°
 Target TVD : 10,549.00
 Target Angle : 0.00°
 ProbeTo Bit : 55.00 ft
 Gamma To Bit :
 Mag Dec : 10.37°

BHA # : 4 Hole Section : 7.785" Hold

% Rotary 97.27 % Set 2.73 Hrs Set 4.33 Hrs Rot 102.58

Bit Depth	Survey Depth	INC (DEG)	AZ (DEG)	Course Length	N / S (ft)	E / W (ft)	TVD (ft)	V/S (ft)	DLS (100ft)	ft / Set	ft / Rot	Orient Start	Orient End	Actual Min Set	Actual Min	TFO	Rotary RPM	WOB Slide	Rot	Flow Rate	SPP Pressure Off	SPP Pressure On	Rotary Torque	String Weight		
																							Torque	Wt	P/up	S/off
7,737.00	7,682.00	1.80	240.50		-1,510.53	-1,605.17	7,266.99	2,204.13	Tie On																	
7,832.00	7,777.00	0.3	287.4	95.00	-1,511.19	-1,606.71	7,361.97	2,205.70	1.69	15.00	80.00	7,737.00	7,752.00		50	60m	30	25.0	20.0	440.00	1,750	1,950		175	235	135
7,928.00	7,873.00	0.3	298.9	96.00	-1,510.99	-1,607.17	7,457.97	2,205.90	0.06		96.00				160		30		18.0							
8,023.00	7,968.00	0.2	295.7	95.00	-1,510.80	-1,607.53	7,552.97	2,206.03	0.11		95.00				160		30		20.0							
8,116.00	8,061.00	0.6	272.5	93.00	-1,510.71	-1,608.17	7,645.97	2,206.43	0.46		93.00				140		30		20.0							
8,212.00	8,157.00	0.7	279.8	96.00	-1,510.59	-1,609.25	7,741.96	2,207.13	0.14		96.00				160		30		20.0	440.00	2,000	2,200		180	240	150
8,307.00	8,252.00	0.7	279.8	95.00	-1,510.39	-1,610.39	7,836.95	2,207.82	0.00		95.00				160		30		20.0							
8,403.00	8,348.00	0.8	277.6	96.00	-1,510.20	-1,611.63	7,932.95	2,208.60	0.11		96.00				160		30		20.0							
8,498.00	8,443.00	0.9	256.6	95.00	-1,510.29	-1,613.01	8,027.94	2,209.66	0.34		95.00				235		30		20.0							
8,593.00	8,538.00	0.6	240.9	95.00	-1,510.70	-1,614.18	8,122.93	2,210.79	0.38	15.00	80.00	8,498.00	8,513.00	60	145	80m	30	25.0	20.0	440.00	1,750	1,950		185	245	150
8,688.00	8,633.00	0.9	248.5	95.00	-1,511.22	-1,615.30	8,217.92	2,211.96	0.33		95.00				150		30		20.0							
8,784.00	8,729.00	1.0	251.5	96.00	-1,511.76	-1,616.80	8,313.91	2,213.42	0.12		96.00				140		30		22.0							
8,879.00	8,824.00	0.7	269.3	95.00	-1,512.03	-1,618.17	8,408.90	2,214.59	0.42	15.00	80.00	8,784.00	8,799.00	85	100	70m	30	20.0	22.0							
8,972.00	8,917.00	0.7	260.5	93.00	-1,512.13	-1,619.29	8,501.89	2,215.48	0.12		93.00				205		30		24.0	440.00	2,025	2,250		188	245	150
9,068.00	9,013.00	0.8	251.0	96.00	-1,512.45	-1,620.51	8,597.88	2,216.58	0.17		96.00				170		30		24.0							
9,163.00	9,108.00	0.8	265.1	95.00	-1,512.72	-1,621.79	8,692.87	2,217.70	0.21		95.00				195		30		24.0							
9,259.00	9,204.00	0.8	254.6	96.00	-1,512.95	-1,623.11	8,788.86	2,218.82	0.15		96.00				295		30		24.0							
9,354.00	9,299.00	1.0	243.9	95.00	-1,513.49	-1,624.49	8,883.85	2,220.19	0.27		95.00				320		30		25.0	440.00	2,150	2,350		195	265	155
9,449.00	9,394.00	1.1	243.3	95.00	-1,514.27	-1,626.05	8,978.83	2,221.86	0.11		95.00				250		30		25.0							
9,545.00	9,490.00	0.2	139.8	96.00	-1,514.81	-1,626.77	9,074.83	2,222.75	1.21	30.00	66.00	9,449.00	9,479.00	55	245	60m	30	25.0	25.0							
9,640.00	9,585.00	0.4	171.4	95.00	-1,515.27	-1,626.61	9,169.83	2,222.95	0.27		95.00				215		30		25.0							
9,733.00	9,678.00	0.4	219.0	93.00	-1,515.84	-1,626.77	9,262.83	2,223.46	0.35		93.00				215		30		30.0	440.00	2,100	2,300		195	275	150
9,827.00	9,772.00	0.1	215.9	94.00	-1,516.16	-1,627.02	9,356.82	2,223.86	0.32		94.00				160		30		30.0							
9,922.00	9,867.00	0.6	215.2	95.00	-1,516.63	-1,627.36	9,451.82	2,224.43	0.53		95.00				140		30		30.0							
10,018.00	9,963.00	1.0	214.4	96.00	-1,517.74	-1,628.12	9,547.81	2,225.74	0.42	10.00	86.00	9,922.00	9,932.00	40	150	50m	30	25.0	30.0							
10,113.00	10,058.00	1.1	208.9	95.00	-1,519.22	-1,629.03	9,642.80	2,227.42	0.15	6.00	89.00	10,018.00	10,024.00	20	135	20m	30	25.0	30.0	440.00	2,100	2,300		210	280	150
10,208.00	10,153.00	1.4	202.2	95.00	-1,521.09	-1,629.91	9,737.77	2,229.35	0.35		95.00				110		30		30.0							
10,303.00	10,248.00	1.4	206.4	95.00	-1,523.20	-1,630.86	9,832.75	2,231.50	0.11		95.00				170		30		30.0							
10,397.00	10,342.00	1.5	208.6	94.00	-1,525.31	-1,631.96	9,926.72	2,233.74	0.12		94.00				165		30		30.0							
10,461.00	10,406.00	1.6	209.9	64.00	-1,526.82	-1,632.81	9,990.69	2,235.40	0.17		64.00				95		30		30.0	440.00	2,100	2,300		217	290	155
10,557.00	10,502.00	2.0	218.4	96.00	-1,529.30	-1,634.52	10,086.64	2,238.34	0.50		96.00				150		30		35.0							
10,684.00	10,629.00	2.0	214.3	127.00	-1,532.87	-1,637.14	10,213.57	2,242.70	0.11		127.00				270		30		35.0							
10,779.00	10,724.00	1.8	216.3	95.00	-1,535.44	-1,638.96	10,308.52	2,245.79	0.22		95.00				285		30		35.0							
10,874.00	10,819.00	1.9	217.0	95.00	-1,537.90	-1,640.79	10,403.47	2,248.81	0.11		95.00				125		30		35.0	440.00	1,900	2,100		215	310	180
10,970.00	10,915.00	2.0	218.4	96.00	-1,540.48	-1,642.79	10,499.41	2,252.04	0.12		96.00				135		30		35.0							
11,065.00	11,010.00	2.1	218.0	95.00	-1,543.15	-1,644.89	10,594.35	2,255.40	0.11		95.00				195		30		35.0	440.00	2,100	2,300		215	315	180

Mud Motor Report

3



Departure Energy Services (US) LP

Company : Laramie Energy II, LLC

Location : Sec 24-T7S-R93W

Well Name : Honea Federal 24-09C

Rig# : Precision 706

Job No : 310016

Directional Driller(s) : Lloyd Berard
Lee Douet

Data

Serial Number : MM 650-008

Previous Run Job# Run Hrs :

Size : 6.63 "

Configuration : 7/8 2.9stg

BHA #:	Bend:	Pad/Stab:	Date In:	Date Out:	Depth In:	Depth Out:	Drig Hrs:	Circ Hrs:	Total Run	Total Hrs:	Ave ROP
4	1.5°		24-Oct-10	30-Oct-10	7799	11065	106.00	21.00	127.00	127.00	30.81

Motor Fail ? : no

Offset pad / Stab size : n/a

Lost Time Hrs : 0.00

Tool Performance : 10"/100 ft

Formations : Williams Fork, Top of Gas, Cam

Parameters

BHA # : 4

Calculated Pressure Drop at the Bit :

(Kpa) (PSI)

183

Well Type : S Well

Weight on Bit :

(sliding) (rotating)

25 35

Adjustable / Fixed Bend '@ : 1.50°

Pump Flow Rate : 450.00

Motor Stalled / # Times : 0

String (Rotary) RPM : 30

Times Jarred Up (Estimate) : 0

String (Rotary) Torque :

Times Jarred Down (Estimate) : 0

Average Differential : 250 psi

Mud Properties

Mud Type : LSND

Oil % / Water % : 96.4

DownHole Temp: (°F)

Mud Weight : 8.8

(Attach mud report, if available)

PV : 26

from MWD tool

Viscosity : 61

YP : 26

Fluid Loss : 8

Solids Content : 3.6

pH : 8.8

Sand Content : 1

Additives : Gel, Caustic, Pac Lv, Hyperdril, Lignite, Desco

Comments of Motor Run / Detailed Description of Events Leading to Failure

Drilled a total of 3266' in 106 drilling hrs (127 total circ hrs). Drilled with 5 - 15% LCM in system as well as 450 - 650 cfm's of air on backside through parasite string. Motor performed well. No stalls and very few psi spikes.
WOB = 20 - 30K, Rotary RPM = 30, GPM = 450
Once above rotary motor drained good.



Departure Energy Services (US) LP

Daily Reports

Daily Report

Day 6



Customer : Laramie Energy II, LLC
 Well Name : Honea Federal 24-09C
 Location : Sec 24-T7S-R93W
 Rig # : Precision 706
 Operator Rep : Cory Claussen
 Phone # : 970-208-8205

DES Job # : 310016
 DES Phone # : 970-379-5595
 Field : Wildcat
 API : 05-045-19930-0
 Permit :

DATE: 17-Oct-10
 MWD TYPE: EM
 Drill Collars: 6 in 4 1/2 X/H
 HWDP: 5 in 4 1/2 XH
 DP: 5 in 4 1/2 XH
 HWDP:
 DP:

Departure Energy Services (US) LP

Detailed BHA / Drill String Configuration										Time		Time Record		Depth		Personnel			
BHA #	3	BHA #	4	00:00	Activity	From	To	Hrs.	Directional Drillers		MWD								
				00:30	TOOH			0.50	Lloyd Berard		Ewert Munoz (Kambi)								
				02:30	Lay Down 8" Tools			2.00	Lee Douet										
				00:00	Standby for Surface Casing			21.50											
Daily Cost Summary																			
									Qty	Description	Per Unit	Total							
									1	Standby Rate	\$ 3,500.00	\$ 3,500.00							
									3	Subsistence Charge	\$ 75.00	\$ 225.00							
Bit Record																			
Size																			
Make																			
Type																			
Nozzles																			
Off Btm Press.																			
WOB																			
Rotary RPM																			
Hours																			
From																			
To																			
Average ROP																			
									Total	24.00									
Current Mud Motors & Jars on Location										Wasatch		MD	TVD						
#	Vendor	Serial Number	Size	Lobe	Stage	Set @	Previous Well Hrs	Daily Drilling	Daily Circulating	Total Motor Hours	In hole								
1	Departure	MM 800-006	7.94 "	7/8	4.0	2.12°				75.90	<input type="checkbox"/>								
2	Wenzel	800-M6-008	8.00 "	7/8	4.0	2.12°					<input type="checkbox"/>								
3	Departure	MM 650-001	6.56 "	7/8	2.9						<input type="checkbox"/>								
4	Departure	MM 650-008	6.63 "	7/8	2.9						<input type="checkbox"/>								
											<input type="checkbox"/>								
											<input type="checkbox"/>								
										Directions To Location		Camp	No						
										From Rifle, Co. go West on I-70 to Rulison exit. Go South on CR 323 approx. 0.5 miles. Turn left onto CR 320 (Rifle to Rulison Road). Drive approx. 9.0 miles, turn right onto CR 317 (Beaver Creek Road). Drive approx. 5.3 miles on Beaver Creek Road. Turn left onto old Beaver Creek Rd (along Beaver Creek).									
										Comments									
Current Torq/Drag Data @ 2400hrs Depth					Mud Data														
Rotating String Wt:					Type: LSND		Chlor:		1,100										
Rotary Torque					Solids: 14.200		Vis: 65		Dens: 10.5										
Up Drag:					Sands: 0.2		WL: 6.0		PV: 25.0										
Down Drag:					% Oils:		PH: 7.8		YP: 3.8										

Daily Report

Day 8



Customer : Laramie Energy II, LLC
 Well Name : Honea Federal 24-09C
 Location : Sec 24-T7S-R93W
 Rig # : Precision 706
 Operator Rep : Cory Claussen

DES Job # : 310016
 DES Phone # : 970-379-5595
 Field : Wildcat
 API : 05-045-19930-0
 Permit :

DATE: 19-Oct-10
 MWD TYPE: EM
 Drill Collars: 6 in 4 1/2 X/H
 HWDP: 5 in 4 1/2 XH
 DP: 5 in 4 1/2 XH
 DP:

Departure Energy Services (US) LP Phone # : 970-208-8205

Detailed BHA / Drill String Configuration					Time	Time Record					Depth			Personnel					
BHA #		3	BHA #		4	00:00	Activity					From	To	Hrs.	Directional Drillers		MWD		
Bit						02:15	Standby for Surface Casing							2.25	Lloyd Berard Lee Douet		Ewert Munoz (Kambi)		
6.5" 7/8 2.9 stg HR PDM						03:30	Pick Up BHA #3/ Scribe EM Tool							1.25					
X/O Sub						05:00	TIH							1.50					
EM UBHO						05:15	Install Rotating Rubber							0.25	Daily Cost Summary				
Gap Sub						05:30	Pick Up Kelly							0.25	Qty	Description		Per Unit	Total
Slick NMDC						06:30	Prep to Drill out							1.00	1	Daily Operating Rate 6 1/2" T		\$ 6,500.00	\$ 6,500.00
Slick NMDC						07:15	Drill Flt, Cmt and Shoe.							0.75	3	Subsistence Charge		\$ 75.00	\$ 225.00
6 x 6 1/4" DC's						07:45	Drill					2546	2566	0.50					
21 jts HWDP						08:00	Circulate/Condition Hole							0.25					
						08:30	F.I.T.							0.50					
						11:00	Drill					2566	2696	2.50					
						12:45	Rig Repair							1.75					
Bit Record						17:00	Drill					2696	3065	4.25					
Size		7.875"				17:30	Rig Service					3065	3065	0.50					
Make		Security				00:00	Drill					3065	3617	6.50					
Type		FX56M																	
Nozzles		5 x 16/32nds																	
Off Btm Press.		1775																	
WOB		20																	
Rotary RPM		30																	
Hours		10.25																	
From		2546.0														Daily Total		\$	6,725.00
To		3617.0														Accumulated Total		\$	51,600.00
Average ROP		104.49				Total								24.00	Formation		MD	TVD	
Current Mud Motors & Jars on Location														Wasatch		1.00	1.00		
#	Vendor	Serial Number	Size	Lobe	Stage	Set @	Previous Well Hrs	Daily Drilling	Daily Circulating	Total Motor Hours	In hole								
1	Departure	MM 800-006	7.94 "	7/8	4.0	2.12°				75.90	<input type="checkbox"/>								
2	Wenzel	800-M6-008	8.00 "	7/8	4.0	2.12°					<input type="checkbox"/>			Directions To Location			Camp	No	
3	Departure	MM 650-001	6.56 "	7/8	2.9	1.50°		10.25	3.45	13.70	<input checked="" type="checkbox"/>			From Rifle, Co. go West on I-70 to Rulison exit. Go South on CR 323 approx. 0.5 miles. Turn left onto CR 320 (Rifle to Rulison Road). Drive approx. 9.0 miles, turn right onto CR 317 (Beaver Creek Road). Drive approx. 5.3 miles on Beaver Creek Road. Turn left onto old Beaver Creek Rd (along Beaver Creek).					
4	Departure	MM 650-008	6.63 "	7/8	2.9						<input type="checkbox"/>								
											<input type="checkbox"/>								
											<input type="checkbox"/>			Comments					
Current Torq/Drag Data @ 2400hrs Depth					Mud Data														
Rotating String Wt:		98			Type: LSND					Chlor:	900								
Rotary Torque					Solids: 11.600					Vis:	38			Dens:	10.0				
Up Drag:		122			Sands: 0.2					WL:	8.0			PV:	13.0				
Down Drag:		95			% Oils:					PH:	9.0			YP:	14.0				

Daily Report

Day 10



Customer : Laramie Energy II, LLC

Well Name : Honea Federal 24-09C

Location : Sec 24-T7S-R93W

Rig # : Precision 706

Operator Rep : Cory Claussen

Phone # : 970-208-8205

DES Job # : 310016

DES Phone # : 970-379-5595

Field : Wildcat

API: 05-045-19930-0

Permit :

DATE: 21-Oct-10

MWD TYPE: EM

Drill Collars: 6 in 4 1/2 X/H

HWDP: 5 in 4 1/2 XH

DP: 5 in 4 1/2 XH

HWDP:

DP:

Detailed BHA / Drill String Configuration					Time	Time Record					Depth			Personnel						
BHA #	3	BHA #	4	00:00	Activity					From	To	Hrs.	Directional Drillers		MWD					
Bit					16:30	Drill					4847	5640	16.50	Lloyd Berard Lee Douet		Matt Ackerman (Kambi)				
6.5" 7/8 2.9 stg HR PDM					17:00	Rig Service					5640	5640	0.50							
X/O Sub					00:00	Drill					5640	5944	7.00							
EM UBHO														Daily Cost Summary						
Gap Sub														Qty	Description		Per Unit	Total		
Slick NMDC														1	Daily Operating Rate 6 1/2" T		\$ 6,500.00	\$ 6,500.00		
Slick NMDC														3	Subsistence Charge		\$ 75.00	\$ 225.00		
6 x 6 1/4" DC's																				
21 jts HWDP																				
Bit Record																				
Size	7.875"																			
Make	Security																			
Type	FX56M																			
Nozzles	5 x 16/32nds																			
Off Btm Press.	2000																			
WOB	20																			
Rotary RPM	30																			
Hours	50.33																			
From	2546.0														Daily Total		\$	6,725.00		
To	5944.0														Accumulated Total		\$	65,050.00		
Average ROP	67.51				Total							24.00	Formation		MD	TVD				
Current Mud Motors & Jars on Location													Wasatch		1.00	1.00				
#	Vendor	Serial Number	Size	Lobe	Stage	Set @	Previous Well Hrs	Daily Drilling	Daily Circulating	Total Motor Hours	In hole									
1	Departure	MM 800-006	7.94 "	7/8	4.0	2.12°				75.90	<input type="checkbox"/>									
2	Wenzel	800-M6-008	8.00 "	7/8	4.0	2.12°					<input type="checkbox"/>		Directions To Location		Camp	No				
3	Departure	MM 650-001	6.56 "	7/8	2.9	1.50°		19.83	2.47	57.50	<input checked="" type="checkbox"/>		From Rifle, Co. go West on I-70 to Rulison exit. Go South on CR 323 approx 0.5 miles. Turn left onto CR 320 (Rifle to Rulison Road). Drive approx. 9. miles, turn right onto CR 317 (Beaver Creek Road). Drive approx. 5.3 miles on Beaver Creek Road. Turn left onto old Beaver Creek Rd (along Beaver Creek)							
4	Departure	MM 650-008	6.63 "	7/8	2.9						<input type="checkbox"/>									
											<input type="checkbox"/>									
											<input type="checkbox"/>		Comments							
Current Torq/Drag Data @ 2400hrs Depth					Mud Data								450 cfm air on backside through parasite string.							
Rotating String Wt:		140			Type: LSND				Chlor:		900									
Rotary Torque					Solids:		11.100		Vis:		49						Dens:		9.9	
Up Drag:		190			Sands:		0.3		WL:		6.0						PV:		21.0	
Down Drag:		110			% Oils:				PH:		8.4						YP:		22.0	

Daily Report

Day 13



Customer : Laramie Energy II, LLC
 Well Name : Honea Federal 24-09C
 Location : Sec 24-T7S-R93W
 Rig # : Precision 706
 Operator Rep : Cory Claussen

DES Job # : 310016
 DES Phone # : 970-379-5595
 Field : Wildcat
 API : 05-045-19930-0
 Permit :

DATE: 24-Oct-10
 MWD TYPE: EM
 Drill Collars: 6 in 4 1/2 X/H
 HWDP: 5 in 4 1/2 XH
 DP: 5 in 4 1/2 XH
 HWDP:
 DP:

Departure Energy Services (US) LP Phone # : 970-208-8205

Detailed BHA / Drill String Configuration					Time	Time Record				Depth			Personnel						
BHA #		3	BHA #		4	00:00	Activity				From	To	Hrs.	Directional Drillers		MWD			
Bit			Bit			06:00	Drill				7672	7799	6.00	Lloyd Berard Lee Douet		Matt Ackerman (Kambi)			
6.5" 7/8 2.9 stg HR PDM			6.5" 7/8 2.8 stg HR PDM			06:30	Circulate/Pump Slug				7799	7799	0.50						
X/O Sub			X/O Sub			10:30	TOOH						4.00						
EM UBHO			EM UBHO			11:45	Change out PDC, PDM and EM Batteries						1.25	Daily Cost Summary					
Gap Sub			Gap Sub			13:00	TIH to Shoe						1.25	Qty	Description		Per Unit	Total	
Slick NMDC			Slick NMDC			15:15	Slip and Cut Drill line						2.25	1	Daily Operating Rate 6 1/2" T		\$ 6,500.00	\$ 6,500.00	
Slick NMDC			Slick NMDC			17:45	TIH						2.50	3	Subsistence Charge		\$ 75.00	\$ 225.00	
6 x 6 1/4" DC's			6 x 6 1/4" DC's			18:15	Wash/ Ream Bridge at 6775'						0.50						
21 jts HWDP			21 jts HWDP			18:30	Repair Air Jammer						0.25						
						19:00	Wash/ Ream 6775' - 7007' with 600 cfm air on ba						0.50						
						20:30	TIH						1.50						
						23:00	Wash/ Ream						2.50						
Bit Record						23:45	TIH						0.75						
Size		7.875"		7.875"		00:00	Wash/ Ream to Bottom 100'						0.25						
Make		Security		Security															
Type		FX56M		FX54M															
Nozzles		5 x 16/32nds		5 x 16/32nds															
Off Btm Press.		1675																	
WOB		24																	
Rotary RPM		30																	
Hours		97																	
From		2546.0		7799											Daily Total		\$	6,725.00	
To		7799.0													Accumulated Total		\$	85,225.00	
Average ROP		54.15				Total							24.00	Formation		MD	TVD		
Current Mud Motors & Jars on Location													Wasatch		1.00	1.00			
													Williams Fork		7,306.25	6,892.00			
1	Departure	MM 800-006	7.94 "	7/8	4.0	2.12°				75.90	<input type="checkbox"/>	Directions To LocationCampNo From Rifle, Co. go West on I-70 to Rulison exit. Go South on CR 323 approx. 0.5 miles. Turn left onto CR 320 (Rifle to Rulison Road). Drive approx. 9.0 miles, turn right onto CR 317 (Beaver Creek Road). Drive approx. 5.3 miles on Beaver Creek Road. Turn left onto old Beaver Creek Rd (along Beaver Creek).							
2	Wenzel	800-M6-008	8.00 "	7/8	4.0	2.12°					<input type="checkbox"/>								
3	Departure	MM 650-001	6.56 "	7/8	2.9	1.50°		5.41	1.09	109.70	<input type="checkbox"/>								
4	Departure	MM 650-008	6.63 "	7/8	2.9	1.50°			3.60	3.60	<input checked="" type="checkbox"/>								
											<input type="checkbox"/>								
											<input type="checkbox"/>								
Current Torq/Drag Data @ 2400hrs Depth					Mud Data														
Rotating String Wt:			165			Type: LSND			Chlor:		1,100								
Rotary Torque						Solids:		13.700		Vis:								60	
Up Drag:			220			Sands:		1.3		WL:								5.4	
Down Drag:			135			% Oils:				PH:								8.0	
										YP:		29.0							

Day 14



DATE: 25-Oct-10

MWD TYPE: EM

Drill Collars: 6 in 4 1/2 X/H

HWDP: 5 in 4 1/2 XH

DP: 5 in 4 1/2 XH

Phone # : 970-208-8205

HWDP:

DP:

Detailed BHA / Drill String Configuration					Time	Time Record				Depth		Personnel								
BHA #	4	BHA #	5	00:00	Activity				From	To	Hrs.	Directional Drillers		MWD						
Bit					00:30	Wash/ Ream to Bottom 100'						0.50	Lloyd Berard Lee Douet		Matt Ackerman (Kambi)					
6.5" 7/8 2.8 stg HR PDM					17:00	Drill				7799	8339	16.50								
X/O Sub					17:30	Rig Service				8339	8339	0.50								
EM UBHO					00:00	Drill				8339	8500	6.50	Daily Cost Summary							
Gap Sub													Qty	Description	Per Unit	Total				
Slick NMDC													1	Daily Operating Rate 6 1/2" T	\$ 6,500.00	\$ 6,500.00				
Slick NMDC													3	Subsistence Charge	\$ 75.00	\$ 225.00				
6 x 6 1/4" DC's																				
21 jts HWDP																				
Bit Record																				
Size	7.875"																			
Make	Security																			
Type	FX54M																			
Nozzles	5 x 16/32nds																			
Off Btm Press.	2000																			
WOB	20																			
Rotary RPM	30																			
Hours	20.59																			
From	7799.0												Daily Total		\$	6,725.00				
To	8500.0												Accumulated Total		\$	91,950.00				
Average ROP	34.05				Total							24.00	Formation		MD	TVD				
Current Mud Motors & Jars on Location												Wasatch		1.00	1.00					
#	Vendor	Serial Number	Size	Lobe	Stage	Set @	Previous Well Hrs	Daily Drilling	Daily Circulating	Total Motor Hours	In hole	Williams Fork		7,306.25	6,892.00					
1	Departure	MM 800-006	7.94 "	7/8	4.0	2.12°				75.90	<input type="checkbox"/>									
2	Wenzel	800-M6-008	8.00 "	7/8	4.0	2.12°					<input type="checkbox"/>	Directions To Location		Camp	No					
3	Departure	MM 650-001	6.56 "	7/8	2.9	1.50°				109.70	<input type="checkbox"/>	From Rifle, Co. go West on I-70 to Rulison exit. Go South on CR 323 approx. 0.5 miles. Turn left onto CR 320 (Rifle to Rulison Road). Drive approx. 9.0 miles, turn right onto CR 317 (Beaver Creek Road). Drive approx. 5.3 miles on Beaver Creek Road. Turn left onto old Beaver Creek Rd (along Beaver Creek).								
4	Departure	MM 650-008	6.63 "	7/8	2.9	1.50°		20.59	1.91	26.10	<input checked="" type="checkbox"/>									
											<input type="checkbox"/>									
											<input type="checkbox"/>	Comments								
Current Torq/Drage Data @ 2400hrs Depth					Mud Data															
Rotating String Wt:		180			Type: LSND				Chlor:		1,000									
Rotary Torque					Solids:		10.800		Vis:		59					Dens:		9.9		
Up Drag:		245			Sands:		1.2		WL:		5.6					PV:		25.0		
Down Drag:		150			% Oils:				PH:		8.0		YP:		27.0					

Daily Report

Day 17



Customer : Laramie Energy II, LLC
 Well Name : Honea Federal 24-09C
 Location : Sec 24-T7S-R93W
 Rig # : Precision 706
 Operator Rep : Cory Claussen

DES Job # : 310016
 DES Phone # : 970-379-5595
 Field : Wildcat
 API : 05-045-19930-0
 Permit :

DATE: 28-Oct-10
 MWD TYPE: EM
 Drill Collars: 6 in 4 1/2 X/H
 HWDP: 5 in 4 1/2 XH
 DP: 5 in 4 1/2 XH
 DP:

Departure Energy Services (US) LP Phone # : 970-208-8205

Detailed BHA / Drill String Configuration										Time		Time Record		Depth		Personnel			
BHA #	4	BHA #	5	00:00	Activity		From	To	Hrs.	Directional Drillers		MWD							
Bit				17:00	Drill		9576	10018	17.00	Lloyd Berard		Matt Ackerman (Kambi)							
6.5" 7/8 2.8 stg HR PDM				17:30	Rig Service		10018	10018	0.50	Lee Douet									
X/O Sub				23:15	Drill		10018	10213	5.75										
EM UBHO				00:00	Work Drill String/ Build Volume		10213	10213	0.75										
Daily Cost Summary																			
Gap Sub										Qty	Description	Per Unit	Total						
Slick NMDC										1	Daily Operating Rate 6 1/2" T	\$ 6,500.00	\$ 6,500.00						
Slick NMDC										3	Subsistence Charge	\$ 75.00	\$ 225.00						
6 x 6 1/4" DC's																			
21 jts HWDP																			
Bit Record																			
Size	7.875"																		
Make	Security																		
Type	FX54M																		
Nozzles	5 x 16/32nds																		
Off Btm Press.	2100																		
WOB	30																		
Rotary RPM	30																		
Hours	80.66																		
From	7799.0																		
To	10213.0																		
Average ROP	29.93																		
										Total	24.00								
Current Mud Motors & Jars on Location										Formation		MD	TVD						
										Wasatch		1.00	1.00						
										Williams Fork		7,306.25	6,892.00						
										Top of Gas		8,755.25	8,341.00						
										Cameo		10,021.25	9,607.00						
										Directions To Location		Camp	No						
										From Rifle, Co. go West on I-70 to Rulison exit. Go South on CR 323 approx.									
										0.5 miles. Turn left onto CR 320 (Rifle to Rulison Road). Drive approx. 9.0									
										miles, turn right onto CR 317 (Beaver Creek Road). Drive approx. 5.3 miles on									
										Beaver Creek Road. Turn left onto old Beaver Creek Rd (along Beaver Creek).									
										Comments									
Current Torq/Drag Data @ 2400hrs Depth										Mud Data		10% LCM, 600 cfm air on backside. Trouble getting surveys and toolfaces.							
Rotating String Wt:		210		Type: LSND		Chlor:		900											
Rotary Torque				Solids: 11.600		Vis: 67		Dens: 10.0											
Up Drag:		280		Sands: 1.2		WL: 5.6		PV: 36.0											
Down Drag:		150		% Oils:		PH: 9.0		YP: 37.0											

