

DATE: 9/20/2017  
DAY # 6

DATE: 9/20/2017  
DAY # 6

AFE No: SA-36-5H-1

Lease/Well No:	University 1-36 #5H						AFE No: SA-36-5H-1	
Current Ops							Frac ops	
Upcoming Ops:							Frac Ops	
Marker Joints:	(7/9,494') - (4-1/2"-11.253' / 13,754')	KOP	10,800'		TD	16,181'		
Int Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950'		PBTD	16'079"		
Production Casing	7" 26# P-110	60	11,170'		TVD	10,938"		
Production Casing	4 1/2" 13.5# P-110	90	11,370'		Orian Flake / Chris Fox			

9	11,370	
<b>DAILY ACTIVITY</b>		

[illegible]

### COST SUMMARY

<b>COST SUMMARY</b>			
<b>Intangible Costs</b>		<b>Tangible Costs</b>	
Water Hauling	C&J Frac	\$189,186	
Dirt Work	API Wireline	\$15,000	
Crane	Weatherford Plugs/ Plug Hands		
Anchors	Klausen Water Transfer		
Trucking - Tanks	Supervision	\$3,000	
Trucking - Trailer House	Stuart Frac Stack		
Trucking - Light Plants	FTR Frac Tanks		
Trucking - Porta Pots	Acid Tanks		
Trucking - Trash Trailer	Porta Pots		
Trucking - Manlift	Manlift		
Trucking - Frac Stack	Light Towers		
Trucking - Trailer Water	Trash Trailer		
Trucking - Zipper Manifold	Trailer House		
	S3 Pumpdown	\$0	
	Daily Intangible Costs	\$207,186	Daily Tangible Costs
	Cum. Intangible Costs	\$207,186	Cum. Tangible Costs
<b>NOTE: All costs are field estimates only.</b>			Previous Day Cum. Cost
			TOTAL DAILY COST
			\$207,186
			TOTAL CUM. COST
			\$207,186

**NOTE: All costs are field estimates only.**

DATE: 9/21/2017  
DAY # 7

DATE: 9/21/2017  
DAY # 7

AFE No: SA-36-5H-1

Lease/Well No:	University 1-36 #5H					AFE No: SA-36-5H-1
Current Ops	Frac Ops					
Upcoming Ops	Frac Ops					
Marker Joints:	(7")9.494")-(4-1/2"-11.253" / 13.754")	KOP	10,800"	TD:	16,181"	
Inter Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950"	PBTD:	16'079"	
Production Casing	7" 26# P-110	60	11,170"	TVD:	10,938"	
Production Casing	4 1/2" 13.5# P-110	90	11,370"	Orion Flake / Chris Fox		

DAILY ACTIVITY	
1	2
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TIME			OPERATION
FROM	TO	HRS	
			Stage 3 Frac: Pumped: Total 15% HCL Acid: 94 bbls. Total Slickwater: 8,584 bbls. Load to recover for this stage: 8,678 bbls. Total load to recover: 26,736 bbls. Containing: Total 100 Mesh: 69,525 lbs. Total 40/70 White: 210,923 lbs. Total 40/70 Garnet:50,488 lbs. Proppant pumped this stage: 330,936 lbs. Total proppant pumped: 1,050,109 lbs.
6:00 AM	7:15 AM	1.25	
7:15 AM	8:15 AM	1	WL had issues starting in the hole. Had to come off the well and add a weight bar.
8:15 AM	10:15 AM	2	RIH set stage 4 CBP at 15,505'. Perforated: 15,489-15,490'. 15,457-15,458', 15,425-15,426', 15,393-15,394'. 15,361-15,362', 15,329-15,330'. All shots fired. LS: 303, PD Rate: 9 bpm, LT: 1166
10:15 AM	1:00 PM	2.75	Stage 4 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 8,643 bbls. Load to recover for this stage: 8,857 bbls. Total load to recover: 35,749 bbls. Containing: Total 100 Mesh: 70,825 lbs. Total 40/70 White: 215,416 lbs. Total 40/70 Garnet:64,575 lbs. Proppant pumped this stage: 350,816 lbs. Total proppant pumped: 1,400,925 lbs.
1:00 PM	3:00 PM	2	RIH set stage 5 CBP at 15,313'. Perforated: 15,297-15,298', 15,265-15,266', 15,233-15,234', 15,201-15,202', 15,169-15,170', 15,137-15,138'. All shots fired. LS: 301, PD Rate: 9 bpm, LT: 1146
3:00 PM	6:15 PM	3.25	Stage 5 Frac: SICP: 3,091 psi. Formation broke at 7,403 psi, while pumping 10 bpm. Pumpdown 115 bbls. Pumped: Total 15% HCL Acid: 83 bbls. Total Slickwater: 9,241 bbls. Load to recover for this stage: 9,324 bbls. Total load to recover: 45,188 bbls. Containing: Total 100 Mesh: 75,423 lbs. Total 40/70 White: 237,577 lbs. Total 40/70 Garnet:57,525 lbs. Proppant pumped this stage: 370,525 lbs. Total proppant pumped: 1,771,450 lbs. SIP: 3,950 psi, with a Frac Gradient of 0.797 psi/ft. Cavg: 61.3 bpm, Pavg: 6,333 psi, Qmax: 67.7 bpm, Pmax: 6,935 psi. ***Notes*** Added 2000 lbs. 25 ppg 100 Mesh slug on pad to relieve pressure. While starting 1.25 ppg 100 Mesh pressure began a steep climb. Screens were cut briefly before pressure began to drop. Stepped into .50 then 1.00 and finally 1.25 ppg to finish 100 Mesh. All proppant pumped.
6:15 PM	7:15 PM	1	API crane went down when swinging over. Had to jump off crane and fix the Emergency shut off switch.
7:15 PM	9:30 PM	2.25	RIH set stage 6 CBP at 15,121'. Perforated: 15,055-15,106', 15,073-15,074', 15,041-15,042', 15,009-15,010'. 14,977-14,978', 14,945-14,946'. All shots fired. LS: 215, PD Rt: 9 bpm, LT: 1107
9:30 PM	12:45 AM	3.25	Stage 6 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 9,032 bbls. Load to recover for this stage: 9,128 bbls. Total load to recover: 54,459 bbls. Containing: Total 100 Mesh: 70,800 lbs. Total 40/70 White: 234,800 lbs. Total 40/70 Garnet:53,250 lbs. Proppant pumped this stage: 358,850 lbs. Total proppant pumped: 2,130,300 lbs.
12:45 AM	3:00 AM	2.25	RIH set stage 7 CBP at 14,929'. Perforated: 14,913-14,914', 14,881-14,882', 14,850-14,851', 14,817-14,818'. 14,785-14,786', 14,752-14,753'. All shots fired. LS: 240, PD Rt: 8 bpm, LT: 1080
3:00 AM	3:45 AM	0.75	Waiting on 1 load of 40/70 garnet. Pressure tested line and tested and re-set pop off. Re-set pop off to 7900 psi
3:45 AM	6:00 AM	2.25	Pumping stage 7.

[illegible]

DATE: 9/22/2017  
DAY # 8

DATE: 9/22/2017  
DAY # 8

AFF No: SA-36-5H-1

Lease/Well No:	University 1-36 #5H						AFE No: SA-36-5H-1	
Current Ops							Frac ops	
Upcoming Ops:							Frac Ops	
Marker Joints:	(7/9,494') - (4-1/2"-11.253' / 13,754')	KOP	10,800'		TD	16,181'		
Int Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950'		PBTD	16'079"		
Production Casing	7" 26# P-110	60	11,170'		TVD	10,938"		
Production Casing	4 1/2" 13.5# P-110	90	11,370'		Orlan Flake / Chris Fox			

9	11,370	
<b>DAILY ACTIVITY</b>		

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DATE: 9/23/2017  
DAY # 9

DATE: 9/23/2017  
DAY # 9

AFF No: SA-36-5H-1

<b>Lease/Well No:</b>	<b>University 1-36 #5H</b>					<b>AFE No: SA-36-5H-1</b>	
<b>Current Ops</b>						<b>Frac ops</b>	
<b>Upcoming Ops:</b>						<b>Frac Ops</b>	
<b>Marker Joints:</b>	<b>(7/9,494') - (4-1/2"-11.253' / 13,754')</b>	<b>KOP</b>	<b>10,800'</b>		<b>TD</b>	<b>16,181'</b>	
<b>Int Casing</b>	<b>9-5/8" 40# J-55 / 9 5/8 40# L80</b>	<b>30</b>	<b>10,950'</b>		<b>PBTD</b>	<b>16'079"</b>	
<b>Production Casing</b>	<b>7" 26# P-110</b>	<b>60</b>	<b>11,170'</b>		<b>TVD</b>	<b>10,938"</b>	
<b>Production Casing</b>	<b>4 1/2" 13.5# P-110</b>	<b>90</b>	<b>11,370'</b>			<b>Orian Flake / Chris Fox</b>	

9	11,370	
<b>DAILY ACTIVITY</b>		

TIME			OPERATION
FROM	TO	HRS	
6:00 AM	8:30 AM	2.5	WL POOH. On inspection of WL tool string the tools were in tact but the first gun had been fired instead of stroking the plug. With shot fired @ 14,337' to 14,338'. The decision was made to RIH with new plug and full tool string.
8:30 AM	11:00 AM	2.5	WL prepared to RIH with new plug and tool string. C&J performed an injection test on the well. During the injection test pressure began a steady climb at 10 bpm walked rate to 20 bpm before shutting down due to pressure only 54 bbls into flush. Let pressure bleed down before attempting to step into rate at 3 bpm before shutting down due to pressure. Opened the well and began flowing back.
11:00 AM	3:30 PM	4.5	Flowed back well for 2 casing volumes. C&J began trying to flush the wellbore. Stepped into rate @ 2.5 bpm worked to 5 bpm then 10 and 20. Pressure began to line out @ 25 bpm 6600 psi. Stepped rate to up reaching 40 bpm @ 7,350 psi before shutting down after pumping 2 casing volumes. Turned well over to WL.
3:30 PM	5:30 PM	2	RIH set stage 10 CBP at 14,348'. Perforated: 14,338'-14,339', 14,333'-14,334', 14,305'-14,306', 14,273'-14,274', 14,241'-14,242', 14,209'-14,210'. All shots fired. LS: 298, PD Rt: 9 bpm, LT: 1111
5:30 PM	6:15 PM	0.75	Stuart greasing well head.
6:15 PM	9:15 PM	3	Stage 10 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 8,742 bbls. Load to recover for this stage: 8,838 bbls. Total load to recover: 91,250 bbls. Containing: Total 100 Mesh: 69,900 lbs, Total 40/70 White: 209,300 lbs, Total 40/70 Garnet: 63,900 lbs. Proppant pumped this stage: 343,100 lbs. Total proppant pumped: 3,522,220 lbs.
9:15 PM	10:30 PM	1.25	Stabbed on well and started trying to go down. We had to come off the well and add the weight bar to the gun string. Once added weight bar we were able to start going down hole.
10:30 PM	12:30 AM	2	RIH set stage 11 CBP at 14,161'. Perforated: 14,145'-14,146', 14,113'-14,114', 14,079'-14,080', 14,049'-14,050', 14,017'-14,018', 13,985'-13,986'. All shots fired. LS: 245, PD Rt: 8 bpm, LT: 1130
12:30 AM	2:00 AM	1.5	Shut down for bad weather and lightning within 5 miles.
2:00 AM	3:00 AM	1	Started firing up equipment to getready to start stage 11.
3:00 AM	4:00 AM	1	Shut down after pumping acid away. Lost 1 belt due to shorting out while on acid. Tried replacing batteries and the whole 1 belt shortedout. Down walking on t-belt.
4:00 AM	6:00 AM	2	Waiting on t-belt to arrive and get swapped out.

	<b>Intangible Costs</b>			<b>Tangible Costs</b>		
Water Hauling	C&J Frac	\$94,593				
Dirt Work	API Wireline	\$10,000				
Crane	Weatherford Plugs/ Plug Hands					
Anchors	Klausen Water Transfer					
Trucking - Tanks	Supervision	\$3,000				
Trucking - Trailer House	Stuart Frac Stack					
Trucking - Light Plants	FTR Frac Tanks					
Trucking - Porta Pots	Acid Tanks					
Trucking - Trash Trailer	Porta Pots					
Trucking - Manlift	Manlift					
Trucking - Frac Stack	Light Towers					
Trucking - Trailer Waler	Trash Trailer					
Trucking - Zipper Manifold	Trailer House					
	S3 Pumpdown	\$3,250				
	Daily Intangible Costs	\$110,843	Daily Tangible Costs			\$0
	Cum. Intangible Costs	\$110,843	Cum. Tangible Costs			\$0
<b>NOTE: All costs are field estimates only.</b>			Previous Day Cum. Cost		\$913,537	
			<b>TOTAL DAILY COST</b>		<b>\$110,843</b>	
			<b>TOTAL CUM. COST</b>		<b>\$1,024,380</b>	

DATE: 9/24/2017  
DAY # 10

DATE: 9/24/2017  
DAY # 10

AFE No: SA-36-5H-1

Lease/Well No:	University 1-36 #5H						AFE No: SA-36-5H-1	
Current Ops							Frac ops	
Upcoming Ops:							Frac Ops	
Marker Joints:	(7/9,494')-(4-1/2"-11,253' / 13,754')	KOP	10,800'		TD	16,181'		
Int Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950'		PBTD	16'079"		
Production Casing	7" 26# P-110	60	11,170'		TVD	10,938"		
Production Casing	4 1/2" 13.5# P-110	90	11,370'		Orian Flake / Chris Fox			

9	11,370	
<b>DAILY ACTIVITY</b>		

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DATE: 9/25/2017  
DAY # 11

DATE: 9/25/2017  
DAY # 11

AFF No: SA-36-5H-1

Lease/Well No:	University 1-36 #5H						AFE No: SA-36-5H-1	
Current Ops							Frac ops	
Upcoming Ops:							Frac Ops	
Marker Joints:	(7/9,494') - (4-1/2"-11.253' / 13,754')	KOP	10,800'		TD	16,181'		
Int Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950'		PBTD	16'079"		
Production Casing	7" 26# P-110	60	11,170'		TVD	10,938"		
Production Casing	4 1/2" 13.5# P-110	90	11,370'		Orian Flake / Chris Fox			

9	11,370	
<b>DAILY ACTIVITY</b>		

TIME			OPERATION
FROM	TO	HRS	
6:00 AM	9:30 AM	3.5	Waiting for C&J to replace the blender. With the blender in place C&J had to work on main power relay before restarting the stage. Bucket tested primed and tested.
9:30 AM	10:30 AM	1	Stage 14 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 10,480 bbls. Load to recover for this stage: 10,576 bbls. Total load to recover: 131,520 bbls. Containing: Total 100 Mesh: 68,600 lbs. Total 40/70 White: 230,120 lbs. Total 40/70 Garnet: 49,201 lbs. Proppant pumped this stage: 347,921 lbs. Total proppant pumped: 4,770,949 lbs.
10:30 AM	12:00 PM	1.5	RIH set stage 15 CBP at 13.393". Perforated: 13.377"-13.378", 13.346"-13.347", 13.313"-13.314", 13.281"-13.282", 13.246"-13.247", 13.217"-13.218". All shots fired. LS: 263, PD Rt: 9 bpm, LT: 1008
12:00 PM	12:45 PM	0.75	Greased Stuart's working valve. But couldn't get all 32 turn Stuart to send out a flush unit.
12:45 PM	4:00 PM	3.25	Stage 15 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 9,264 bbls. Load to recover for this stage: 9,401 bbls. Total load to recover: 141,014 bbls. Containing: Total 100 Mesh: 78,771 lbs. Total 40/70 White: 242,612 lbs. Total 40/70 Garnet: 33,757 lbs. Proppant pumped this stage: 355,140 lbs. Total proppant pumped: 5,126,089 lbs.
4:00 PM	5:30 PM	1.5	RIH set stage 16 CBP at 13.201". Perforated: 13.185"-13.186", 13.153"-13.154", 13.123"-13.124", 13.089"-13.090", 13.057"-13.058", 13.025"-13.026". All shots fired. LS: 318, PD Rt: 9 bpm, LT: 1058
5:30 PM	8:30 PM	3	Started greasing well then had to shut down for severe weather and lightning. After storm passed finished greasing well and fired up all equipment to get ready to start stage 16.
8:30 PM	11:15 PM	2.75	Stage 16 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 8,348 bbls. Load to recover for this stage: 8,444 bbls. Total load to recover: 149,531 bbls. Containing: Total 100 Mesh: 71,520 lbs. Total 40/70 White: 227,230 lbs. Total 40/70 Garnet: 27,150 lbs. Proppant pumped this stage: 325,900 lbs. Total proppant pumped: 5,451,989 lbs.
11:15 PM	1:30 AM	2.25	RIH set stage 17 CBP at 13.009". Perforated: 12.993"-12.994", 12.961"-12.962", 12.929"-12.930", 12.895"-12.896", 12.865"-12.866", 12.833"-12.834". All shots fired. LS: 240, PD Rt: 8 bpm, LT: 1000
1:30 AM	6:00 AM	4.5	Pumping stage 17. Had pressure issues trying to get acid on formation after ball seated.

Intangible Costs			Tangible Costs		
Water Hauling	C&J Frac	\$283,785			
Dirt Work	API Wireline	\$17,000			
Crane	Weatherford Plugs/ Plug Hands	\$16,000			
Anchors	Klausen Water Transfer				
Trucking - Tanks	Supervision	\$3,000			
Trucking - Trailer House	Stuart Frac Stack				
Trucking - Light Plants	FTR Frac Tanks				
Trucking - Porta Pots	Acid Tanks				
Trucking - Trash Trailer	Porta Pots				
Trucking - Manlift	Manlift				
Trucking - Frac Stack	Light Towers				
Trucking - Trailer Water	Trash Trailer				
Trucking - Zipper Manifold	Trailer House				
	S3 Pumpdown	\$5,500			
	Daily Intangible Costs	\$325,285	Daily Tangible Costs		\$0
	Cum. Intangible Costs	\$325,285	Cum. Tangible Costs		\$0
NOTE: All costs are field estimates only.			Previous Day Cum. Cost		\$1,232,080
			TOTAL DAILY COST		\$325,285
			TOTAL CUM. COST		\$1,557,365

DATE: 9/26/2017  
DAY # 12

DATE: 9/26/2017  
DAY # 12

Lease/Well No:	University 1-36 #5H					AFE No: SA-36-5H-1
Current Ops						Frac ops
Upcoming Ops						Frac Ops
Marker Joints:	(7"/9,494')-(4-1/2"-11,253' / 13,754')	KOP	10,800'	TD	16,181'	
Int Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950'	PBTD	16'079'	
Production Casing	7" 26# P-110	60	11,370'	TVD	10,938'	
Production Casing	4 1/2" 13.5# P-110	90	11,170'	Orion Flake / Chris Fox		

### DAILY ACTIVITY

TIME		OPERATION	
FROM	TO	HRS	
			Stage 17 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 8,689 bbls. Load to recover for this stage: 8,785 bbls. Total load to recover: 158,392 bbls. Containing: Total 100 Mesh: 75,400 lbs. Total 40/70 White: 216,025 lbs. Total 40/70 Garnet: 46,549 lbs. Proppant pumped this stage: 337,974 lbs. Total proppant pumped: 5,789,963 lbs.
6:00 AM	6:15 AM	0.25	
6:15 AM	7:45 AM	1.5	RIH set stage 18 CBP at 12,817". Perforated: 12,801'-12,802", 12,769'-12,770", 12,737'-12,738", 12,705'-12,706", 12,670'-12,671", 12,641'-12,642". All shots fired. LS: 297, PD Rt: 9 bpm, LT: 1039
7:45 AM	8:45 AM	1	Stuart replaced packing on the working valve and greased inside valves on flow cross.
8:45 AM	11:15 AM	2.5	Stage 18 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 8,158 bbls. Load to recover for this stage: 8,259 bbls. Total load to recover: 166,713 bbls. Containing: Total 100 Mesh: 85,914 lbs. Total 40/70 White: 218,074 lbs. Total 40/70 Garnet: lbs. Proppant pumped this stage: 303,988 lbs. Total proppant pumped: 6,093,951 lbs.
11:15 AM	12:45 PM	1.5	RIH set stage 19 CBP at 12,625". Perforated: 12,609'-12,610", 12,577'-12,578", 12,545'-12,546", 12,513'-12,514", 12,481'-12,482", 12,455'-12,456". All shots fired. LS: 301, PD Rt: 9 bpm, LT: 1127
12:45 PM	3:45 PM	3	Stage 19 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 8,983 bbls. Load to recover for this stage: 9,085 bbls. Total load to recover: 175,842 bbls. Containing: Total 100 Mesh: 81,848 lbs. Total 40/70 White: 228,937 lbs. Total 40/70 Garnet: 60,759 lbs. Proppant pumped this stage: 371,544 lbs. Total proppant pumped: 6,465,495 lbs.
3:45 PM	5:45 PM	2	RIH set stage 20 CBP at 12,433". Perforated: 12,417'-12,418", 12,385'-12,386", 12,353'-12,354", 12,321'-12,322", 12,289'-12,290", 12,257'-12,258". All shots fired.
5:45 PM	7:00 PM	1.25	Greasing and flushing well head valves.
7:00 PM	10:00 PM	3	Stage 20 Frac: Pumped: Total 15% HCL Acid: 96 bbls. Total Slickwater: 9,043 bbls. Load to recover for this stage: 9,139 bbls. Total load to recover: 185,019 bbls. Containing: Total 100 Mesh: 80,000 lbs. Total 40/70 White: 228,950 lbs. Total 40/70 Garnet: 54,500 lbs. Proppant pumped this stage: 363,450 lbs. Total proppant pumped: 6,828,945 lbs.
10:00 PM	11:45 PM	1.75	RIH set stage 21 CBP at 12,241". Perforated: 12,222'-12,223", 12,193'-12,194", 12,161'-12,162", 12,129'-12,130", 12,097'-12,098", 12,065'-12,066". All shots fired. LS: 245, PD Rt: 8 bpm, LT: 975
11:45 PM	12:30 AM	0.75	Stuart greasing the well head valves.
12:30 AM	3:45 AM	3.25	Had to shut down on 40/70 white in stage 21 due to water transfer having a line bust on the recirc line.
3:45 AM	5:15 AM	1.5	Repaired line and filled tanks to resume stage 21. Greased well head while line was being repaired. Working valve and master valve not sealing.
5:15 AM	6:00 AM	0.75	Pumping stage 21.

<b>Intangible Costs</b>			<b>Tangible Costs</b>	
Water Hauling	C&J Frac	\$378,152		
Dirt Work	API Wireline	\$22,000		
Crane	Weatherford Plugs/ Plug Hands	\$4,200		
Anchors	Klausen Water Transfer			
Trucking - Tanks	Supervision	\$3,000		
Trucking - Trailer House	Stuart Frac Stack			
Trucking - Light Plants	FTR Frac Tanks			
Trucking - Porta Pots	Acid Tanks			
Trucking - Trash Trailer	Porta Pots			
Trucking - Manlift	Manlift			
Trucking - Frac Stack	Light Towers			
Trucking - Trailer Water	Trash Trailer			
Trucking - Zipper Manifold	Trailer House			
	S3 Pumpdown	\$7,250		
	Daily Intangible Costs	\$414,602	Daily Tangible Costs	\$0
	Cum. Intangible Costs	\$414,602	Cum. Tangible Costs	\$0
<b>NOTE: All costs are field estimates only.</b>			Previous Day Cum. Cost	\$1,557,369
			<b>TOTAL DAILY COST</b>	<b>\$414,602</b>
			<b>TOTAL CUM. COST</b>	<b>\$1,971,967</b>

DATE: 9/27/2017  
DAY # 13

AFE No: SA-36-5H-1

Lease/Well No:	University 1-36 #5H						AFE No: SA-36-5H-1
Current Ops							Frac Ops
Upcoming Ops:							Frac Ops
Marker Joints:	(7"/9.494")-(4-1/2"-11.253" / 13.754")	KOP	10,800'		TD	16,181'	
Int Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950'		PBTD	16'079'	
Production Casing	7" 26# P-110	60	11,170'		TVD	10,938'	
Production Casing	4 1/2" 13.5# P-110	90	11,370'		Orlan Flake / Chris Fox		

### DAILY ACTIVITY

[illegible][illegible]



DATE: 9/28/2017  
DAY # 14

DATE: 9/28/2017  
DAY # 14

AFF No: SA-36-5H-1

Lease/Well No:	University 1-36 #5H					AFE No: SA-36-5H-1	
Current Ops						Frac ops	
Upcoming Ops:						Frac Ops	
Marker Joints:	(7/9,494')-(4-1/2"-11.253' / 13,754')	KOP	10,800'	TD	16,181'		
Int Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950'	PBTD	16'079"		
Production Casing	7" 26# P-110	60	11,170'	TVD	10,938"		
Production Casing	4 1/2" 13.5# P-110	90	11,370'	Orian Flake / Chris Fox			

0	11,370	
<b>DAILY ACTIVITY</b>		

TIME			OPERATION
FROM	TO	HRS	
6:00 AM	8:30 AM	2.5	Waiting for Acid delivery
8:30 AM	11:15 AM	2.75	Found a leak around the well head dug down as far as possible but could not see due to water in the cellar called for a vacuum truck to clean out the cellar to verify the leak. Upon inspection the intermediate casing valve had been leaking between the valve and the nipple.The connections were replaced and tightened before starting the stage.
11:15 AM	1:45 PM	2.5	Stage 26 Frac: Pumped: Total 15% HCL Acid: 190 bbls. Total Slickwater: 8,600 bbls. Load to recover for this stage: 8,790 bbls. Total load to recover: 240,927 bbls. Containing: Total 100 Mesh: 78,415 lbs. Total 40/70 White: 227,293 lbs. Total 40/70 Garnet:52,104 lbs. Proppant pumped this stage: 357,812 lbs. Total proppant pumped: 8,276,437 lbs.
1:45 PM	3:30 PM	1.75	RtH set stage 27 CBP at 11,087'. Perforated: 11,073'-11,074'; 11,041'-11,042'; 11,009'-11,010'; 10,977'-10,978'; 10,945'-10,946'; 10,916'-10,917'. All shots fired. LS: 163. PD Rt: 0 bpm. LT: 1020
3:30 PM	6:00 PM	2.5	Stage 27 Frac: Pumped: Total 15% HCL Acid: 188 bbls. Total Slickwater: 8,736 bbls. Load to recover for this stage: 8,824 bbls. Total load to recover: 248,851 bbls. Containing: Total 100 Mesh: 86,627 lbs. Total 40/70 White: 236,173 lbs. Total 40/70 Garnet:54,800 lbs. Proppant pumped this stage: 379,800 lbs. Total proppant pumped: 8,656,237 lbs.
6:00 PM	7:30 PM	1.5	Kill plug set at 10,710'. Negative test performed and kill plug holding. Wellhead psi at 0psi. S3 pumpdown rigged down and moved off location.
7:30 PM	10:00 PM	2.5	C&J and API rigging down and moving off location. Stuart nippeded down well head to flow cross and put HP flange on top of flow cross.
10:00 PM	1:30 AM	3.5	C&J finish rigging down and getting off location.
1:30 AM	6:00 AM	4.5	SDFN.

	Intangible Costs	Tangible Costs
Water Hauling	C&J Frac	\$189,120
Dirt Work	API Wireline	\$21,000
Crane	Weatherford Plugs/ Plug Hands	\$14,900
Anchors	Klausen Water Transfer	\$18,000
Trucking - Tanks	Supervision	\$3,000
Trucking - Trailer House	Stuart Frac Stack	\$9,100
Trucking - Light Plants	FTR Frac Tanks	\$23,844
Trucking - Porta Pots	Acid Tanks	
Trucking - Trash Trailer	Porta Pots	\$480
Trucking - Manlift	Manlift	\$480
Trucking - Frac Stack	Light Towers	\$3,360
Trucking - Trailer Water	Baker Hughes CIO2	\$31,572
Trucking - Zipper Manifold	Baker Hughes Scalesorb	\$20,575
	S3 Pumpdown	\$10,000
	Renegade	\$22,134
	Daily Intangible Costs	\$367,565
	Cum. Intangible Costs	\$367,565
	Daily Tangible Costs	
	Cum. Tangible Costs	\$0
	Previous Day Cum. Cost	\$2,386,027
	TOTAL DAILY COST	\$367,565
	TOTAL CUM. COST	\$2,753,592

NOTE: All costs are field estimates only.

DATE: 9/29/2017  
DAY # 15

Lease/Well No:		University 1-36 #5H				AF# No: SA-36-5H-1	
Current Ops		Frac ops					
Upcoming Ops		Frac Ops					
Marker Joints:		(77'9.494')-(4-1/2"-11.253' / 13.754')		KOP		TD: 16,181'	
Int Casing		9-5/8" 40# J-55 / 9 5/8 40# L80		30		PBTD: 16'079'	
Production Casing		7" 26# P-110		60		TVD: 10,938'	
Production Casing		4 1/2" 13.5# P-110		90		Orlan Flake / Chris Fox	

9	11,370	
<b>DAILY ACTIVITY</b>		

[illegible]

Intangible Costs		Tangible Costs	
Water Hauling	C&J Frac	\$0	
Dirt Work	API Wireline	\$0	
Crane	Weatherford Plugs/ Plug Hands	\$0	
Anchors	Klausen Water Transfer	\$0	
Trucking - Tanks	Supervision	\$3,000	
Trucking - Trailer House	Stuart Frac Stack	\$650	
Trucking - Light Plants	FTR Frac Tanks	\$300	
Trucking - Porta Pots	Acid Tanks		
Trucking - Trash Trailer	Porta Pots	\$60	
Trucking - Manlift	Manlift	\$95	
Trucking - Frac Stack	Light Towers	\$240	
Trucking - Trailer Water	Baker Hughes CIO2	\$0	
Trucking - Zipper Manifold	Baker Hughes Scalesorb	\$0	
	S3 Pumpdown	\$0	
	Renegade	\$0	
	Daily Intangible Costs	\$4,345	Daily Tangible Costs
	Cum. Intangible Costs	\$4,345	Cum. Tangible Costs
			Previous Day Cum. Cost
			TOTAL DAILY COST
			TOTAL CUM. COST

NOTE: All costs are field estimates only.

Zarvona Energy

DAILY WORKOVER / COMPLETION REPORT

DATE: 9/30/2017  
DAY # 16

AFN No: SA-36-5H-1

Lease/Well No:

University 1-36 #5H

Current Ops

Frac ops

Upcoming Ops

Frac Ops

Marker Joints:

(7"/9.494")-(4-1/2"-11.253' / 13.754')

KOP

10.800'

TD

16.181'

Int Casing

9-5/8" 40# J-55 / 9 5/8 40# L80

30

10.950'

PBTD

16'079'

Production Casing

7" 26# P-110

60

11.170'

TVD

10.938'

Production Casing

4 1/2" 13.5# P-110

90

11.370'

Orian Flake / Chris Fox

DAILY ACTIVITY

TIME

OPERATION

FROM

TO

HRS

6:00 AM

9:00 AM

3

Waiting on Legend CT Spartan downhole tools and MIRU Flowback plug catcher and The Crane arrived and was set up. Had the remaining water in the flow back tanks pulled down and added to the frac tanks. Then pulled the acid tanks down so they could be released.

9:00 AM

11:00 AM

2

Legend CT and Spartan Tools arrived on location. Spartan waited on the pump to arrive before spotting equipment.

11:00 AM

4:00 PM

5

MIRU Legend 2-3/8" CTU.N2 pump, Fluid pump, BOP,plug catcher, & 3" iron for flowback operations. Dress CT , make up coil connector and pull test to 25k & 43k. Verified that all hydraulics and weight indicator were working correctly. RU BHA consisting of Screw on connector (3.130'), Crossover (3.130') dual flapper check valves(2.90'), jars(2.90'), hydraulic disconnect (2.90'), NOV Agitator (2.90'), Bico motor (2.90") X-over Sub (2.90") & (3.75") JZ Rock bit. Tool Length @ 26.97'. Tested circulation @ 3bpm @ 4100 psi without FR. Stabbed on the well.

4:00 PM

5:00 PM

1

test all lines to 8,500 psi good test. Held safety meeting and open the well 32 turns. Open well pressure @ 25 psi.

5:00 PM

6:00 PM

1

RIH @ 30 fpm until we reached 250'. At 250' we started rolling a pump over at 1 bpm. We sped up to 110 fpm RIH 1 bpm in return while pumping FR at 25 per 10.

6:00 PM

7:00 PM

1

Performed weight check @ 10,000' @ 32,000 lbs. Slowed to 30 fpm and tagged liner top. Increased rate to 3.5 bpm. Checked returns 3.5 in 3.5 out.

7:00 PM

7:30 PM

0.5

Tagged the Cap Plug at 10,680' and drilled through plug in 4 minutes while pumping 3.5/3.5 bpm In/Out with a Circ Pressure of 3815 psi and Wellhead pressure of 1215 psi. Sent a 10 bbl gelled sweep while RIH to first CBP.

7:30 PM

8:00 PM

0.5

Tagged the Plug for stage 27 at 11,082' and drilled through plug in 8 minutes while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,769 psi and Wellhead pressure of 2099 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

8:00 PM

8:30 PM

0.5

Tagged the Plug for stage 26 at 11,269', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,905 psi and Wellhead pressure of 2,198 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

8:30 PM

8:45 PM

0.25

Tagged the Plug for stage 25 at 11,400', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,905 psi and Wellhead pressure of 2,210 psi. Sent a 10 bbl gelled sweep while RIH to next plug. Pulled sample catcher and had good small piece returns.

8:45 PM

9:00 PM

0.25

Tagged the Plug for stage 24 at 11,596', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,865 psi and Wellhead pressure of 2,067 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

9:00 PM

9:30 PM

0.5

Tagged the Plug for stage 23 at 11,786', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,621 psi and Wellhead pressure of 1831 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

9:30 PM

9:45 PM

0.25

Tagged the Plug for stage 22 at 11,978', while pumping 3.5/4.5 bpm In/Out with a Circ Pressure of 4,433 psi and Wellhead pressure of 1,640 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

9:45 PM

10:00 PM

0.25

Tagged the Plug for stage 21 at 12,164', while pumping 3.5/4.2 bpm In/Out with a Circ Pressure of 4,405 psi and Wellhead pressure of 1,720 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

10:00 PM

10:15 PM

0.25

Tagged the Plug for stage 20 at 12,354', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,450 psi and Wellhead pressure of 1,700 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

10:15 PM

10:30 PM

0.25

Tagged the Plug for stage 19 at 12,550', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,960 psi and Wellhead pressure of 1,763 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

10:30 PM

10:45 PM

0.25

Tagged the Plug for stage 18 at 12,735', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,777 psi and Wellhead pressure of 1,877 psi. Sent a 10 bbl gelled sweep while RIH to next plug. Pulled sample catcher and had good small returns.

10:45 PM

11:15 PM

0.5

Tagged the Plug for stage 17 at 12,921', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,560 psi and Wellhead pressure of 1700 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

11:15 PM

11:30 PM

0.25

Tagged the Plug for stage 16 at 13,117', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,605 psi and Wellhead pressure of 1700 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

11:30 PM

12:00 AM

0.5

Tagged the Plug for stage 15 at 13,310', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,157 psi and Wellhead pressure of 1609 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

12:00 AM

12:30 AM

0.5

Tagged the Plug for stage 14 at 13,503', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,400 psi and Wellhead pressure of 1800 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

12:30 AM

1:00 AM

0.5

Tagged the Plug for stage 13 at 13,690', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,110 psi and Wellhead pressure of 1680 psi. Sent a 20-10-20 bbl gelled sweep while RIH to next plug. Pulled sample catcher and had good small returns.

1:00 AM

1:15 AM

0.25

Tagged the Plug for stage 12 at 13,882', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,660 psi and Wellhead pressure of 1570 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

1:15 AM

1:45 AM

0.5

Tagged the Plug for stage 11 at 14,069', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,410 psi and Wellhead pressure of 1600 psi. Sent a 10 bbl gelled sweep while RIH to next plug.

1:45 AM

2:15 AM

0.5

Tagged the Plug for stage 10 at 14,259', while pumping 3.5/4.0 bpm In/Out with a Circ Pressure of 4,310 psi and Wellhead pressure of 1650 psi. Sent a 20-10-20 bbl gelled sweep while RIH to next plug.

2:15 AM

3:00 AM

0.75

Tagged the Plug for stage 9 at 14,454', while pumping 3.5/4.2 bpm In/Out with a Circ Pressure of 4,000 psi and Wellhead pressure of 1480 psi. Sent a 20-10-20 bbl gelled sweep while RIH to next plug.

3:00 AM

3:45 AM

0.75

RIH to 14,647'. Sent 10-10-10 bbl gel sweep. Circulated for 5 minutes then short trip up to 10,800' due to washing a lot of sand on the way through last 3 plugs. Pulled sample catcher and still getting small plugparts and some sand.

3:45 AM

6:00 AM

2.25

Short trip / Sent 20-10-20 bbl gel sweep at 10,800' for short trip. Circulating at 10,800'

Intangible Costs

Tangible Costs

Water Hauling

C&J Frac

\$0

Dirt Work

API Wireline

\$0

Crane

Weatherford Plugs/ Plug Hands

\$0

Anchors

Klausen Water Transfer

\$0

Trucking - Tanks		Supervision	\$3,000		
Trucking - Trailer House		Stuart Frac Stack	\$650		
Trucking - Light Plants		FTR Frac Tanks	\$300		
Trucking - Porta Pots		Acid Tanks			
Trucking - Trash Trailer		Porta Pots	\$60		
Trucking - Manlift		Manlift	\$95		
Trucking - Frac Stack		Light Towers	\$240		
Trucking - Trailer Water		Baker Hughes CIO2	\$0		
Trucking - Zipper Manifold		Baker Hughes Scalesorb	\$0		
		S3 Pumpdown	\$0		
		Renegade	\$0		
		Daily Intangible Costs	\$4,345	Daily Tangible Costs	\$0
		Cum. Intangible Costs	\$4,345	Cum. Tangible Costs	\$0
NOTE: All costs are field estimates only.				Previous Day Cum. Cost	\$2,757,937
				TOTAL DAILY COST	\$4,345
				TOTAL CUM. COST	\$2,762,282

DATE: 10/1/2017  
DAY # 17

DATE: 10/1/2017  
DAY # 17

AFE No: SA-36-5H-1

Lease/Well No:	University 1-36 #5H						AFE No: SA-36-5H-1	
Current Ops							Frac ops	
Upcoming Ops:							Frac Ops	
Marker Joints:	(7/9,494')-(4-1/2"-11.253' / 13,754')	KOP	10,800'		TD	16,181'		
Int Casing	9-5/8" 40# J-55 / 9 5/8 40# L80	30	10,950'		PBTD	16'079"		
Production Casing	7" 26# P-110	60	11,170'		TVD	10,938"		
Production Casing	4 1/2" 13.5# P-110	90	11,370'		Orian Flake / Chris Fox			

9	11,370	
<b>DAILY ACTIVITY</b>		

TIME			OPERATION
FROM	TO	HRS	
			Began RIH after short trip once last sweep left the reel. While RIH around 13,900' began fighting friction. Added pipe on pipe @ .25 per 10. Legend had issue with the electronic depth indicator and recalibrated to the reel as we RIH.
6:00 AM	8:00 AM	2	
8:00 AM	8:15 AM	0.25	Tagged the Plug for stage 8 at 14,647'; while pumping 3,514.2 bpm In/Out with a Circ Pressure of 4,000 psi and Wellhead pressure of 1492 psi. Sent a 10 bbl gelled sweep while RIH to next plug.
8:15 AM	9:00 AM	0.75	Tagged the Plug for stage 7 at 14,923'; while pumping 3,514.2 bpm In/Out with a Circ Pressure of 4,000 psi and Wellhead pressure of 1365 psi. Sent a 10 bbl gelled sweep while RIH to next plug.
9:00 AM	9:15 AM	0.25	Tagged the Plug for stage 6 at 15,115'; while pumping 3,014.2 bpm In/Out with a Circ Pressure of 3,800 psi and Wellhead pressure of 1364 psi. Sent a 10 bbl gelled sweep while RIH to next plug.
9:15 AM	10:00 AM	0.75	Tagged the Plug for stage 5 at 15,312'; while pumping 3,014.2 bpm In/Out with a Circ Pressure of 3,800 psi and Wellhead pressure of 1445 psi. Sent a 10 bbl gelled sweep while RIH to next plug.
10:00 AM	10:45 AM	0.75	Tagged the Plug for stage 4 at 15,503'; while pumping 3,014.2 bpm In/Out with a Circ Pressure of 3,800 psi and Wellhead pressure of 1228 psi. Sent a 10 bbl gelled sweep while RIH to next plug.
10:45 AM	11:00 AM	0.25	Tagged the Plug for stage 3 at 15,692'; while pumping 3,014.2 bpm In/Out with a Circ Pressure of 4,000 psi and Wellhead pressure of 1349 psi. Sent a 10-10-10 bbl gelled sweep while RIH to next plug.
11:00 AM	11:45 AM	0.75	Tagged the Plug for stage 2 at 15,884'; while pumping 3,014.2 bpm In/Out with a Circ Pressure of 4,000 psi and Wellhead pressure of 1396 psi. Sent a 10 bbl gelled sweep while RIH to next plug.
11:45 AM	5:45 PM	6	Ran down to the bottom. Sent 10-10-10 bbbs sweep. Mixed KCL and began POOH. While POOH the coil began to groove due to the rollers on the injector head. Legend fixed the rollers and began POOH @ 40 fpm. Sent 10-10-10 @ 14,000' and another 10 bbbs @ 12,000' and chased it out of the bit to the curve.
5:45 PM	6:45 PM	1	Coil bumped up on surface. Well head closed and pressure blew off.
6:45 PM	8:45 PM	2	Come off well and inspected tools. All tools attached. Spartan broke down BHA. Stabbed back on well and coil unit blow down.
8:45 PM	1:45 AM	5	Legend coil tubing rigging down and moving equipment off location.

Intangible Costs		Tangible Costs	
Water Hauling	C&J Frac	\$0	
Dirt Work	API Wireline	\$0	
Crane	Weatherford Plugs/ Plug Hands	\$0	
Anchors	Klausen Water Transfer	\$0	
Trucking - Tanks	Supervision	\$3,000	
Trucking - Trailer House	Stuart Frac Stack	\$650	
Trucking - Light Plants	FTR Frac Tanks	\$300	
Trucking - Porta Pots	Acid Tanks		
Trucking - Trash Trailer	Spartan Thru Tubing	\$23,167	
Trucking - Manifold	Legend Coil Tubing	\$110,000	
Trucking - Frac Stack	North Texas Crane	\$8,300	
Trucking - Trailer Water	Baker Hughes CIO2	\$0	
Trucking - Zipper Manifold	Baker Hughes Scalesorb	\$0	
Legend CT	S3 Pumpdown	\$0	
Spartan Tools	Renegade	\$0	
	Daily Intangible Costs	\$145,417	Daily Tangible Costs
	Cum. Intangible Costs	\$145,417	Cum. Tangible Costs
			Previous Day Cum. Cost
			TOTAL DAILY COST
			TOTAL CUM. COST
NOTE: All costs are field estimates only.			