DAILY REPORT

DATE	August 31, 2018	**API NUMBER**	42495341060000	**REPORT #**	2
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	12:00	6.0	WO OFFSET 1H WELL.
12:00	12:15	0.3	RU PUMPDOWN AND TEST LINES TO 12,100 PSI. GOOD TEST. BLEED PSI OFF AND OPEN WELL. SICP 0 PSI.
12:15	13:00	0.8	ROLL OVER 1 BPM ESTABLISH RATE , RAISED RATE TO 4 BPM TO GET PUMPS INTO LOCKUP. PRESSURE GRADUALLY INCREASED TO 11,850 PSI. WE SD PUMPS AND MONITORED PSI FOR 10 MINUTES, NO LEAK OFF. OPENED WELL TO FBT AND SURGED WELL PRESSURE TO 0 PSI. CAME BACK UP ON RATE AND PRESSURED UP TO 11,675 PSI. HELD 10 MINUTES NO LEAK OFF. BLED PSI OFF AND SI WELL.
13:00	22:00	9.0	WO CT UNIT FOR CLEANOUT.
22:00	06:00	8.0	MIRU= CRETIC 2 5/8" COIL TUBING UNIT. MU AND RIH W/ 4.5" JZ TRICONE BIT, MOTOR, XRV, CIRC SUB,HYD DISCONNECT, JARS, AND BPV. TOTAL TOOL LENGTH 26.88'. LOAD REEL, TEST MOTOR, TES LUBE & FLOW IRON TO 7,500 PSI. (HAD TO REPAIR REEL HYDRAULICS. COIL HAD JUMPED OUT OF THE GOOSE NECK AND HAD TO BE PUT BACK IN.)
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 1, 2018	**API NUMBER**	42495341060000	**REPORT #**	3
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	07:00	1.0	FINISH RIG UP. TEST LUBE TO 5,000 PSI. BLEED PRESS BACK TO 0 PSI.
07:00	19:15	12.3	OPEN WELL. RIH PUMPING 1.25 BPM WITH 626 PSI CP, AND 56 PSI WHP. INCREASE RATE TO 3.5 BPM AT 11,800' WHILE FLOWING WELL BBL IN / BBL OUT HOLDING 166 PSI ON WELL. CP 4,062 PSI. CONTINUE IN HOLE AND TAG AT 19,871' CTM. CONTINUE IN HOLE TO 21,102' CTM. 6.3'/MIN. CP 1,585 -- WH 67 --21,128'INCREASE RATE 3 BPM --CP 2,400 -- WH 89 -- 21,190' PUMP 10 BBL GEL SWEEP, 10 BBL SPACER ,WITH 1/2 GAL PER 10 BBL PIPE ON PIPE -- 21,633' CATCH SAMPLE OF RETURNS LOOKS LIKE CEMENT -- TAG UP @ 21,795'. DRILLED THRU IT CONTINUE IN HOLE TO 21,866'. COULD NOT MAKE ANY HOLE. PU & PUMP 10,10, 10 SWEEPS.
19:15	06:00	10.8	PU TO 21,854' PULLING HEAVY. APPEARS TO HAVE WIPER PLUG AROUND TOOLS. CIRC PRESS IS UP 1,800 PSI FROM NORMAL. PUMP SWEEP W PIPE IN NEUTRAL AND SWI ONCE SWEEPS WERE OUT SURGED A FEW TIMES W NO MOVEMENT. PUMPED HEAVY VISC SWEEP. SURGED WELL 3 MORE TIMES W HARD SHUT DOWNS W/ NO MOVEMENT. DROPPED BALL & DISCONECTED TOOLS- 21,886' CTM. POOH. (DEPTHS SHOWED TO BE HUNG UP IN THE LANDING COLLAR.)
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 2, 2018	**API NUMBER**	42495341060000	**REPORT #**	4
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	09:30	3.5	POOH WITH CRETIC 2 5/8" COIL TUBING. CLOSE 7 1/16" MANUAL FRAC VALVE.
09:30	10:00	0.5	R/U IRONMAN FLUID PUMPS -- PRIME UP & TEST.
10:00	10:30	0.5	OPEN B SECTION VALVES -- START TO PUMP -- 3.6 BPM -- 2,900 PSI -- INCREASE RATE 5 BPM -- 4,966 PSI -- INCREASE RATE 6.5 BPM -- 5,082 PSI. SHUT DOWN 244 BBLS PUMPED. 8 MINUTES 4,385 PSI. APPEARS BURST PORT SUBS ARE OPEN. CALLED SUPERINTENDENT TO PASS ON INFORMATION. CLOSE IN B SECTION VALVES RELEASE 4,385 PSI TO FLOWBACK TANK.
10:30	13:00	2.5	R/D CRETIC 2 5/8" COIL TUBING UNIT.
13:00	15:15	2.3	R/U ROYALTY E-LINE -- LUBRIFLANGE NIPPLE UP 7 1/16" 15K LUBRICATOR FLANGE.
15:15	17:30	2.3	R/U ROYALTY WL CREW. RIH WITH CCL, SETTING SLEEVE & PERF GUNS. IRONMAN PUMPS KICKED OUT DUE TO 9,800 PSI -- SHUT DOWN. E-LINE TOOLS AT 16,008'. 207 BBLS PUMPED. POOH WITH E-LINE TOOLS. CLOSE 7 1/16" 15K NAMUAL FRAC VALVE.
17:30	18:15	0.8	WAIT ON THUNDERSTORM TO PASS.
18:15	20:00	1.8	START TO PUMP -- 6 BPM -- 7,778 PSI -- 10 BBL --6 BPM --9,000 PSI -- SWITCH TO 15% ACID -- PUMP ACID -- 8 BPM -- 8,800 PSI --91 BBLS --SWITCH TO TREATED WATER -- 8 BPM -- 8,800 PSI -- 466 BBL -- ACID ON FORMATION -- BREAK AT 8,300 PSI -- FELL TO 6,200 PSI -- SHUT DOWN 610 BBLS -- 4,553 PSI.
20:00	22:00	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, SETTING SLEEVE & PERF GUNS. PERFORATE STAGE #1: FROM 21,694' - 21,875'. PUMP DOWN VOLUME 433 BBLS. POOH. ALL GUNS FIRED.
22:00	06:00	8.0	WAIT ON FRAC TO MIRU.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 9, 2018	**API NUMBER**	42495341060000	**REPORT #**	5
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	18:00	12.0	NU FRAC STACK AND TEST TO 14,000 PSI. MIRU FLOW IRON AND HALF PIT AND TEST TO 8,000 PSI. PREP LOCATION AND MIRU 11 FRAC TANKS.
18:00	06:00	12.0	WAIT ON HALLIBURTON SAND EQUIPMENT
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 10, 2018	**API NUMBER**	42495341060000	**REPORT #**	6
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	06:00	24.0	CONTINUE TO PREP LOCATION. NU RIG LOCK. MIRU ROYALTY WIRELINE. MIRU HALLIBURTON FRAC EQUIPMENT. LAY WATER TRANSFER LINE FROM PIT AND MIRU SWIFT WATER BIOCIDE UNIT. FILL FRAC TANKS.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 11, 2018	**API NUMBER**	42495341060000	**REPORT #**	7
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	06:00	24.0	MIRU VALOR PUMP DOWN TRUCKS. COMPLETE RIG UP OF HALLIBURTON FRAC EQUIPMENT. WAIT ON OFFSET OPS.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 12, 2018	**API NUMBER**	42495341060000	**REPORT #**	8
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	21:00	15.0	WAIT ON 1H OFFSET OPERATION
21:00	22:45	1.8	WELL SWAP
22:45	01:15	2.5	FRAC STAGE 1: RU FRAC CREW AND PT FRAC LINES TO 12,282 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 10,338 BBLS FRAC FLUID, LTR THIS STAGE 11,602 BBLS, TLTR- 11,602 BBLS. PERFORM STEP RATE TEST --80 BPM --7,700 PSI -- 64 BPM -- 7,014 PSI -- 50 BPM -- 6,314 -- 35 BPM -- 5,697 PSI -- 20 BPM --5,105 PSI -- ISIP 4,664 --I MINUTE 4,609 PSI. WELL SCREENED OUT WITH 2.25#/GAL 100 MESH ON FORMATION.
01:15	03:00	1.8	OPEN WELL TO FLOW BACK TANK -- FLOW BACK 130 BBLS -- R/U HES TO PUMP ON WELL -- 3.6 BPM -- 11,616 PSI -- 225 BBLS PUMPED. SHUT DOWN
03:00	06:00	3.0	OPEN WELL TO FLOW BACK TANK -- FLOW BACK 500 BBLS.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 13, 2018	**API NUMBER**	42495341060000	**REPORT #**	9
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	17:00	11.0	OPEN WELL TO VALOR PUMP AND PUMP 667 BBLS. FINAL PUMP IN PRESSURE 11,600 PSI AT 3 BPM. OPEN WELL TO FB TANK AND FLOW BACK 710 BBLS. OPEN WELL TO FRAC AND PUMP 2 GEL SWEEPS AND 3,000 GAL 15% HCL ALONG WITH 1,317 BBLS OF SLICK WATER. WORKED RATE UP SLOWLY TO 24 BPM BEFORE PRESSURE SPIKED TO 11,800 PSI. COULD NOT PUMP IN TO WELL.
17:00	06:00	13.0	WAIT ON COIL TBG UNIT.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 14, 2018	**API NUMBER**	42495341060000	**REPORT #**	10
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	23:00	17.0	WAIT ON COIL TUBING UNIT FOR CLEAN OUT.
23:00	01:00	2.0	COIL TUBING PARTNERS 2 5/8" COIL TUBING UNIT -- FLUID PUMP -- WET KIT ON LOCATION -- SPOT EQUIPMENT START TO R/U. LUBRI FLANGE & RENEGADE NIPPLE DOWN RIG LOCK SYSTEM. LOAD COIL TUBING WITH 110 BBLS WATER AND FLUSH.
01:00	02:00	1.0	PULL TEST COIL CONNECTOR TO 50,000# -- GOOD PULL TEST.WELD ON COIL CONNECTOR -- 3.125" O.D. -- 1.360" I.D. -- 0.40 LENGTH --P/U AND MAKE UP TOOLS -- DUAL FLAPPER BACK PRESSURE VALVE -- 3.130" O.D. -- 1.020" I.D. -- 1.12 LENGTH -- BI DIRECTIONAL HAILEY JARS -- 3.130"O.D. --1.050" I.D. --3.86 LENGTH -- HYDRAULIC DISCONNECT 15/16" BALL -- 3.140" O.D. -- 1.000" I.D. -- 1.91 LENGTH -- DUAL CIRCULATING SUB 5/8" BALL -- 3.130" O.D. -- 1.000"I.D. -- 088 LENGTH -- TOE TAPPER WITH FLEX SUB -- 3.130" O.D. -- 6.83 LENGTH -- TITAN MOTOR 5 BPM -- 3.130" O.D. -- 11.82 LENGTH -- JZ HYBRID BIT -- 4.50" O.D. -- 0.50 LENGTH. TOTAL TOOL LENGTH 27.32 FT. TEST MOTOR TO 5 BPM @ 5,000 PSI -- GOOD TEST
02:00	03:00	1.0	PRESSURE TEST LUBRICATOR AND BOPS TO 7,500 PSI -- GOOD TEST. RELEASE PSI TO 5,000 PSI.
03:00	06:00	3.0	OPEN WELL -- 4,500 PSI -- START IN HOLE WITH COIL TUBING.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 15, 2018	**API NUMBER**	42495341060000	**REPORT #**	11
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	17:45	11.8	CONTINUE IN HOLE W/ 2 5/8" COIL TBG PUMPING .5 BPM AND FLOWING WELL BBL IN/ BBL OUT. INCREASE RATE TO 3.5 BPM AT 11,386" AND BEGIN PUMPING POP. CP = 6,200 PSI, WHP = 4,200 PSI. TA PBTD AT 21,934' CTM. PUMP 10 BBL GEL SWEEP, 10 BBL SPACER, AND 10 BBL GEL SWEEP. WAIT FOR SWEEPS TO EXIT TBG AND CHASE SWEEPS OUT OF THE HOLE. PUMP 20 BBL SWEEP AT 18,800'. PUMP SWEEP 20 BBL AT 16,000' AND AT 12,000'CONTINUE OUT OF HOLE
17:45	22:00	4.3	PERFORM INJECTION TEST -- PUMP 20 BPM AT 9,250 PSI LOWER RATE TO 17 BPM AT 8,350 PSI PUMP TOTAL 482 BBL. SHUT DOWN. RIG DOWN COIL TUBING UNIT.
22:00	00:00	2.0	M/I -- R/U ROYALTY E-LINE -- RENEGADE RIG LOCK SYSTEM.
00:00	02:30	2.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 21,680' PERFORATE STAGE #2 FROM 21,498' - 21,668'. PUMP DOWN VOLUME 494 BBLS. POOH. ALL GUN FIRED. DROP BALL ON TOP MASTER VALVE.
02:30	06:00	3.5	PUMPING STAGE 2 @ REPORT TIME
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 16, 2018	**API NUMBER**	42495341060000	**REPORT #**	12
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	06:45	0.8	FRAC STAGE 2: RU FRAC CREW AND PT FRAC LINES TO 12,314 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 15,759 BBLS FRAC FLUID, LTR THIS STAGE 17,400 BBLS, TLTR- 29,002 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED. OST 5210 TRACER RAN ON THIS STAGE STEP RATE TEST 80 BPM -- 10,510 PSI 65 BPM -- 9,174 PSI 50 BPM -- 7,920 PSI 35 BPM -- 7,029 PSI 20 BPM -- 6,252 PSI ISIP -- 5,332 PSI 1 MINUTE -- 5,086 PSI FINAL STEP RATE 64 BPM 8594 49 BPM 7385 33 BPM 6328 16 BPM 5415
06:45	09:00	2.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 21,483 STAGE #3 FROM 21,301 - 21,469. PUMP DOWN VOLUME 444 BBLS. POOH. ALL GUNS FIRED. DRO BALL ON TOP MASTER VALVE.
09:00	11:45	2.8	WO OFFSET OPS.
11:45	15:30	3.8	FRAC STAGE 3: RU FRAC CREW AND PT FRAC LINES TO 12,181 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 14,998 BBLS FRAC FLUID, LTR THIS STAGE 16,177 BBLS, TLTR- 16,177 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED. ACID STEP DOWN 76 BPM--10,850 65 BPM--9,493 50 BPM--8,295 35 BPM--7,198 20 BPM--6,268 ISIP--5,234 1 MIN--5,073 FINISH FRAC STEP DOWN 93 BPM--10,299 80 BPM--8,932 65 BPM--8,000 50 BPM--7,421 34 BPM--6,300 20 BPM--6,000 ISIP--5,224
15:30	18:00	2.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 21,286 STAGE #4 FROM 21,104- 21,274. PUMP DOWN VOLUME 438 BBLS. POOH. ALL GUNS FIRED. DROF BALL ON TOP MASTER VALVE.
18:00	18:45	0.8	WO OFFSET OPS.
18:45	19:45	1.0	HALLIBURTON WELL SWAP. REPAIR PUMPS = CHECK OUT SAND SCREWS ON BLENDER.
19:45	23:15	3.5	FRAC STAGE 4: RU FRAC CREW AND PT FRAC LINES TO 12,316 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 15,061 BBLS FRAC FLUID, LTR THIS STAGE 15,498 BBLS, TLTR- 60,677 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED. STEP RATE TEST = 76 BPM - 10,630 PSI = 65 BPM -9,562 =50 BPM -8,446 = 35 BPM-7,580 =20 BPM 6,675 = ISIP-5,643 = 1 MIN-5,069 FINAL TEST = 80 BPM - 9,100 PSI = 65 BPM -8,230 = 50 BPM - 7,560 = 35 BPM-6,800 = 20 BPM - 5,920 = ISIP-5,321 PSI = 1 MIN -5,207
23:15	01:45	2.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 21,089 STAGE #4 FROM 20,907- 21,077. PUMP DOWN VOLUME 463 BBLS. POOH. ALL GUNS FIRED. DROF BALL ON TOP MASTER VALVE.
01:45	04:15	2.5	WO OFFSET OPS.
04:15	05:15	1.0	HALLIBURTON WELL SWAP.
05:15	06:00	0.8	PUMPING STAGE 5
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 17, 2018	**API NUMBER**	42495341060000	**REPORT #**	13
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	09:00	3.0	FRAC STAGE 5: RU FRAC CREW AND PT FRAC LINES TO 12,212 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 13,739 BBLS FRAC FLUID, LTR THIS STAGE 14,875 BBLS, TLTR- 75,552 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED. ACID STEP DOWN RATE 80 BPM 10,270 67 BPM 9,289 50 BPM 8,134 36 BPM 7,462 21 BPM 6,660 ISIP 5701 1 MIN--5406 POST FRAC STEP DOWN 80 BPM 10,060 65 BPM 9,236 50 BPM 8,095 35 BPM 7,125 20 BPM 6,438 ISIP 5,367 1 MIN 5,219
09:00	11:30	2.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 20,892 STAGE #6 FROM 20,706 - 20,880. PUMP DOWN VOLUME 440 BBLS. POOH. ALL GUNS FIRED. DROI BALL ON TOP MASTER VALVE.
11:30	13:00	1.5	WAIT ON OFFSET OPPS
13:00	14:15	1.3	STARTED STAGE 1 , WAS ON .25 SAND PARTED FLANGE ON PUMP, FLUSH WELL SD TO REPAIR
14:15	15:00	0.8	SWAP 2 PUMPS OUT
15:00	17:45	2.8	FRAC STAGE 6: RU FRAC CREW AND PT FRAC LINES TO 12,132 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 14,474 BBLS FRAC FLUID, LTR THIS STAGE 15,525 BBLS, TLTR- 91,077 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
17:45	20:15	2.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 20,691 STAGE #7 FROM 20,505- 20,679 PUMP DOWN VOLUME 424 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
20:15	20:45	0.5	WAIT ON OFFSET OPPS
20:45	21:45	1.0	HALLIBURTON WELL SWAP. = SWAP OUT 2 PUMPS - REPLACE BLUNGER IN 1 PUMP.
21:45	00:45	3.0	FRAC STAGE 7: RU FRAC CREW AND PT FRAC LINES TO 12,475 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 11,835 BBLS FRAC FLUID, LTR THIS STAGE 12,331 BBLS, TLTR- 103,407 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
00:45	03:30	2.8	WAIT ON OFFSET OPPS
03:30	05:30	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 20,488 STAGE #8 FROM 20,304 - 20,476 PUMP DOWN VOLUME 417 BBLS. POOH. ALL GUNS FIRED. DROF BALL ON TOP MASTER VALVE.
05:30	06:00	0.5	WAIT ON OFFSET OPPS
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 18, 2018	**API NUMBER**	42495341060000	**REPORT #**	14
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	06:30	0.5	WO OFFSET OPS
06:30	07:00	0.5	WELL SWAP
07:00	10:15	3.3	FRAC STAGE 8: RU FRAC CREW AND PT FRAC LINES TO 12,090 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 12,093 BBLS FRAC FLUID, LTR THIS STAGE 13,152 BBLS, TLTR- 116,559 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
10:15	11:30	1.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 20,289 STAGE #9 FROM 20,104 - 20,277 PUMP DOWN VOLUME 389 BBLS. POOH. ALL GUNS FIRED. DROI BALL ON TOP MASTER VALVE.
11:30	14:00	2.5	WO OFFSET OPS
14:00	15:00	1.0	WELL SWAP
15:00	18:30	3.5	FRAC STAGE 9: RU FRAC CREW AND PT FRAC LINES TO 12,045 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 15,275 BBLS FRAC FLUID, LTR THIS STAGE 15,744 BBLS, TLTR- 132,303 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
18:30	20:30	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 20,089 STAGE #10 FROM 19,903 - 20,077 PUMP DOWN VOLUME 405 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
20:30	00:00	3.5	WO OFFSET OPS
00:00	01:00	1.0	WELL SWAP
01:00	01:30	0.5	SELECT = WATER TRANSFER HAD TO SWAP OUT FILTER TRAILER.
01:30	04:15	2.8	FRAC STAGE 10: RU FRAC CREW AND PT FRAC LINES TO 12,123 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 10,987 BBLS FRAC FLUID, LTR THIS STAGE 11,463 BBLS, TLTR- 143,766 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
04:15	06:00	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP. AT 19,888 STAGE #11 FROM 19,702 - 19,876 PUMP DOWN VOLUME 383 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 19, 2018	**API NUMBER**	42495341060000	**REPORT #**	15
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	08:00	2.0	WAIT ON OFFSET OPERATION.
08:00	08:30	0.5	WELL SWAP
08:30	11:45	3.3	FRAC STAGE 11: RU FRAC CREW AND PT FRAC LINES TO 12,074 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 11,005 BBLS FRAC FLUID, LTR THIS STAGE 11,977 BBLS, TLTR- 155,744 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
11:45	12:45	1.0	WAIT ON OFFSET OPERATION.
12:45	14:45	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 19,687 STAGE #12 FROM 19,501'- 19,675' PUMP DOWN VOLUME 350 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
14:45	16:15	1.5	WAIT ON OFFSET OPERATION.
16:15	17:15	1.0	WELL SWAP.
17:15	18:00	0.8	REPAIR LEAKS FRAC = REPLACE SEAL 3" CHIKSAN = CHANGE 2 EACH 2" LO-TORQ BLEED OFF MANIFOLD.
18:00	21:30	3.5	FRAC STAGE 12: RU FRAC CREW AND PT FRAC LINES TO 12,234 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 14,198 BBLS FRAC FLUID, LTR THIS STAGE 14,619 BBLS, TLTR- 170,363 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
21:30	23:45	2.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 19,486 STAGE #13 FROM 19,299'- 19,474' PUMP DOWN VOLUME 357 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
23:45	01:45	2.0	WAIT ON OFFSET OPERATION.
01:45	02:45	1.0	WELL SWAP.
02:45	05:30	2.8	FRAC STAGE 13 RU FRAC CREW AND PT FRAC LINES TO 12,327 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 10,653 BBLS FRAC FLUID, LTR THIS STAGE 11,082 BBLS, TLTR- 181,373 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
05:30	06:00	0.5	PERFORATE STAGE 14 @ REPORT TIME
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 20, 2018	**API NUMBER**	42495341060000	**REPORT #**	16
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	07:45	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 19,283 STAGE #14 FROM 19,095' - 19,271'. PUMP DOWN VOLUME 328 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
07:45	10:00	2.3	WAIT ON OFFSET OPPS
10:00	13:45	3.8	FRAC STAGE 14 RU FRAC CREW AND PT FRAC LINES TO 12,242 PSI, FRAC STAGE W/ 4,000GAL 15% HCL, 12,885 BBLS FRAC FLUID, LTR THIS STAGE 13,790 BBLS, TLTR- 195,163 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
13:45	15:45	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 19,080 STAGE #15 FROM 18,916' - 19,067'. PUMP DOWN VOLUME- 325 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
15:45	18:00	2.3	WO OFFSET OPS
18:00	18:30	0.5	WELL SWAP
18:30	19:00	0.5	START STAGE =
19:00	19:45	0.8	SHUT DOWN FOR BAD WEATHER IN AREA.
19:45	22:45	3.0	FRAC STAGE 15 RU FRAC CREW AND PT FRAC LINES TO 12,253 PSI, FRAC STAGE W/ 3,000GAL 15% HCL, 14,339 BBLS FRAC FLUID, LTR THIS STAGE 14,735 BBLS, TLTR- 209,982 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
22:45	02:00	3.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 18,901 STAGE #16 FROM 18,740' - 18,889'. PUMP DOWN VOLUME- 328 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
02:00	03:15	1.3	WO OFFSET OPS
03:15	03:45	0.5	WELL SWAP
03:45	06:00	2.3	STARTED FRAC STAGE= REPORT TIME
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 21, 2018	**API NUMBER**	42495341060000	**REPORT #**	17
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	07:00	1.0	FRAC STAGE 16 RU FRAC CREW AND PT FRAC LINES TO 12,162 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 12,573 BBLS FRAC FLUID, LTR THIS STAGE 12,973 BBLS, TLTR- 222,955 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
07:00	09:00	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 18,723' STAGE #17 FROM 18,559' - 18,711'. PUMP DOWN VOLUME- 324 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
09:00	10:45	1.8	WO OFFSET UL SPRUCE 1621-21 1H FRAC OPERATIONS.
10:45	11:45	1.0	WELL SWAP
11:45	14:30	2.8	FRAC STAGE 17: RU FRAC CREW AND PT FRAC LINES TO 12,313 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 11,903 BBLS FRAC FLUID, LTR THIS STAGE 12,299 BBLS, TLTR- 235,253 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
14:30	16:30	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 18,545' STAGE #18 FROM 18,381' - 18,532'. PUMP DOWN VOLUME- 312 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
16:30	18:30	2.0	WO OFFSET UL SPRUCE 1621-21 1H FRAC OPERATIONS.
18:30	19:30	1.0	WELL SWAP
19:30	22:45	3.3	FRAC STAGE 18: RU FRAC CREW AND PT FRAC LINES TO 12,168 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 13,680 BBLS FRAC FLUID, LTR THIS STAGE 14,064 BBLS, TLTR- 249,317 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
22:45	01:00	2.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 18,366' STAGE #19 FROM 18,202' - 18,354'. PUMP DOWN VOLUME- 288 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
01:00	04:30	3.5	WAIT ON OFFSET OPERATION.
04:30	05:00	0.5	WELL SWAP
05:00	06:00	1.0	START TO FRAC STAGE 19
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 22, 2018	**API NUMBER**	42495341060000	**REPORT #**	18
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	08:30	2.5	FRAC STAGE 19: RU FRAC CREW AND PT FRAC LINES TO 12,292 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 13,420 BBLS FRAC FLUID, LTR THIS STAGE 13,779 BBLS, TLTR- 263,096 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
08:30	10:30	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 18,189' STAGE #20 FROM 18,024' - 18,175'. PUMP DOWN VOLUME- 292 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
10:30	13:00	2.5	WO OFFSET OPS
13:00	14:00	1.0	WELL SWAP
14:00	17:45	3.8	FRAC STAGE 20: RU FRAC CREW AND PT FRAC LINES TO 12,210 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 15,024 BBLS FRAC FLUID, LTR THIS STAGE 15,388 BBLS, TLTR- 278,483 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
17:45	20:00	2.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 18,009' STAGE #21 FROM 17,845' - 17,997'. PUMP DOWN VOLUME- 270 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
20:00	20:45	0.8	WAIT ON OFFSET OPS
20:45	21:45	1.0	WELL SWAP
21:45	22:00	0.3	PRESSURE TEST AND REPAIR LEAKS.
22:00	01:00	3.0	FRAC STAGE 21: RU FRAC CREW AND PT FRAC LINES TO 12,113 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 11,346 BBLS FRAC FLUID, LTR THIS STAGE 11,687 BBLS, TLTR- 290,170 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
01:00	03:15	2.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 17,830' STAGE #22 FROM 17,653' - 17,818'. PUMP DOWN VOLUME- 264 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
03:15	04:15	1.0	WAIT ON OFFSET OPS
04:15	05:15	1.0	WELL SWAP
05:15	06:00	0.8	FRAC STAGE 22
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 23, 2018	**API NUMBER**	42495341060000	**REPORT #**	19
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	08:45	2.8	FRAC STAGE 22: RU FRAC CREW AND PT FRAC LINES TO 12,261 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 15,071 BBLS FRAC FLUID, LTR THIS STAGE 15,406 BBLS, TLTR- 305,577 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
08:45	10:45	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM MVP MID-TEMP PLUG AT 17,638' STAGE #23 FROM 17,462' - 17,626'. PUMP DOWN VOLUME- 236 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
10:45	13:30	2.8	WO OFFSET OPS
13:30	14:30	1.0	WELL SWAP
14:30	17:45	3.3	FRAC STAGE 23: RU FRAC CREW AND PT FRAC LINES TO 12,251 PSI, FRAC STAGE W/ 3,000 GAL 15% HCL, 11,023 BBLS FRAC FLUID, LTR THIS STAGE 11,330 BBLS, TLTR- 316,907 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
17:45	06:00	12.3	RDMO FRAC AND FRAC ASSIST
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 28, 2018	**API NUMBER**	42495341060000	**REPORT #**	20
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	15:45	9.8	MIRU FRAC AND FRAC ASSIST
15:45	16:00	0.3	PT PUMPDOWN LINES AND LOS STAND PIPE TO 10,000 PSI, HELD 10 MINUTES- GOOD TEST.
16:00	19:30	3.5	WO LOS TO DELIVER ENOUGH SAND FOR FOR FIRST STAGE, ROYALTY WIRELINE NU GREASE PACKAGE AND COMPLETE FIRST PERFORATING GUN.
19:30	21:30	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 17,447' PERF STAGE #24 FROM 17,270' - 17,435'. PUMP DOWN VOLUME- 344 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
21:30	01:45	4.3	WO T-BELT AND PRE-FILL SAND.
01:45	02:30	0.8	OPEN WELL AND BEGAN PUMPING FRAC STAGE #24, WHILE TRYING TO LOAD HOPPER MALFUNCTION OF T-BELT FORCED US TO SD TO ADDRESS ISSUE
02:30	03:15	0.8	REPAIR T-BELT
03:15	04:00	0.8	RESUMED STAGE #24 DURING 1.5 LB/G 100 MESH WATER TRANSFERS PUMP @ PIT SHUT DOWN ON THEM AND WE HAD TO FLUSH WELL AND SD.
04:00	04:30	0.5	REPAIR WATER TRANSFER PUMP.
04:30	06:00	1.5	RESUMED STAGE #24- SD DUE TO HIGH PRESSURE LEAK ON BLOCK VALVE BEHIND PUMP #9. REPAIR IRON.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 29, 2018	**API NUMBER**	42495341060000	**REPORT #**	21
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	08:15	2.3	FRAC STAGE 24: RU FRAC CREW AND PT FRAC LINES TO 11,290 PSI, FRAC STAGE W/ 3,078 GAL 15% HCL, 18,314 BBLS FRAC FLUID, LTR THIS STAGE 18,239 BBLS, TLTR- 18,240 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
08:15	08:45	0.5	RIH W/ WIRELINE LOST CCL, POOH. BAD WIRE BEHIND PANEL BOARD.
08:45	11:15	2.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 17,255 PERF STAGE #25 FROM 17,079' - 17,243'. PUMP DOWN VOLUME- 233 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
11:15	12:45	1.5	STARTED PUMPING STAGE #25 DURING FIRST CYCLE HAD TO SD TO REPAIR FR PUMP.
12:45	13:00	0.3	REPAIR FR PUMP
13:00	15:30	2.5	FRAC STAGE 25: RU FRAC CREW AND PT FRAC LINES TO 11,250 PSI, FRAC STAGE W/ 2,990 GAL 15% HCL, 14,071 BBLS FRAC FLUID, LTR THIS STAGE 14,304 BBLS, TLTR- 32,516 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
15:30	17:15	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 17,064 PERF STAGE #26 FROM 16,887' - 17,052'. PUMP DOWN VOLUME- 228 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
17:15	18:45	1.5	Started Pumping Stg#26 Had to SD due to issues with FR Chem pumps.
18:45	20:00	1.3	Bypass HVFR screen , RU Backup HVFR pump.
20:00	22:00	2.0	Resume : FRAC STAGE 26: RU FRAC CREW AND PT FRAC LINES TO 11,286 PSI, FRAC STAGE W/ 2,995 GAL 15% HCL, 12,871 BBLS FRAC FLUID, LTR THIS STAGE 12,844 BBLS, TLTR- 45,314 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
22:00	00:00	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 16,872 PERF STAGE #27 FROM 16,696' - 16,859'. PUMP DOWN VOLUME- 280 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
00:00	00:45	0.8	Grease Frac Stack.
00:45	01:30	0.8	Prime Up /PSI Test - Leak on 3x2 tee going to PD line. Removed and replaced W/ 3" chicksan to down joint resume PSI test. to 11,989.
01:30	04:30	3.0	FRAC STAGE 27: RU FRAC CREW AND PT FRAC LINES TO 11,932 PSI, FRAC STAGE W/ 3,078 GAL 15% HCL, 12,270 BBLS FRAC FLUID, LTR THIS STAGE 12,550 BBLS, TLTR- 57,869 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
04:30	05:15	0.8	Replace 3x2 pump down tee and PSI test to 9500.
05:15	06:00	0.8	Current Ops: WL RIH PNP Stg#28
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	September 30, 2018	**API NUMBER**	42495341060000	**REPORT #**	22
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	07:00	1.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 16,681' PERF STAGE #28 FROM 16,504'-16,669'. PUMP DOWN VOLUME- 200 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
07:00	10:45	3.8	FRAC STAGE 28: RU FRAC CREW AND PT FRAC LINES TO 11,932 PSI, FRAC STAGE W/ 2,990GAL 15% HCL, 13,641 BBLS FRAC FLUID, LTR THIS STAGE 14,317 BBLS, TLTR- 72,144 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
10:45	12:30	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 16,489' PERF STAGE #29 FROM 16,312'-16,477'. PUMP DOWN VOLUME- 196 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
12:30	13:30	1.0	Operations on other pad well
13:30	16:15	2.8	FRAC STAGE 29: RU FRAC CREW AND PT FRAC LINES TO 11,330 PSI, FRAC STAGE W/ 3,007GAL 15% HCL, 13,443 BBLS FRAC FLUID, LTR THIS STAGE 13,639 BBLS, TLTR- 85,794 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
16:15	18:15	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 16,297' PERF STAGE #30 FROM 16,121'-16,285'. PUMP DOWN VOLUME- 177 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
18:15	20:15	2.0	WO OFFSET OPERATIONS
20:15	20:45	0.5	Frac Crew Swap Wells, Pump Maintenance PUPT/Equalize SICP
20:45	23:30	2.8	FRAC STAGE 30: RU FRAC CREW AND PT FRAC LINES TO 11,330 PSI, FRAC STAGE W/ 3,007GAL 15% HCL, 13,443 BBLS FRAC FLUID, LTR THIS STAGE 13,639 BBLS, TLTR- 85,794 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
23:30	23:45	0.3	R/U ROYALTY WL CREW / Load Lubricator pressure test to 8500psi / Equalize SICP 6000psi
23:45	02:00	2.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 16,069' PERF STAGE #31 FROM 15,930'-16,094'. PUMP DOWN VOLUME- 176 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
02:00	04:30	2.5	Wait on Offset well Operations
04:30	06:00	1.5	FRAC STAGE 31: @ Report time
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	October 1, 2018	**API NUMBER**	42495341060000	**REPORT #**	23
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	06:45	0.8	FRAC STAGE 31: RU FRAC CREW AND PT FRAC LINES TO 11,950 PSI, FRAC STAGE W/ 2,972GAL 15% HCL, 11,772 BBLS FRAC FLUID, LTR THIS STAGE 11,974 BBLS, TLTR- 110,245 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
06:45	08:45	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 15,914' PERF STAGE #32 FROM 15,738'-15,902'. PUMP DOWN VOLUME- 168 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
08:45	11:45	3.0	WO OTHER PAD WELLS, GREASE HYD VALVE ON 1H
11:45	14:15	2.5	FRAC STAGE 32: RU FRAC CREW AND PT FRAC LINES TO 11,559 PSI, FRAC STAGE W/ 2,972 GAL 15% HCL, 11,628 BBLS FRAC FLUID, LTR THIS STAGE 11,628 BBLS, TLTR- 121,873 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
14:15	16:00	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 15,723' PERF STAGE #33 FROM 15,546'-15,711'. PUMP DOWN VOLUME- 166 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
16:00	17:45	1.8	WO OFFSET PAD WELLS
17:45	20:30	2.8	FRAC STAGE 33: RU FRAC CREW AND PT FRAC LINES TO 11,585 PSI, FRAC STAGE W/ 3,078 GAL 15% HCL, 11,681 BBLS FRAC FLUID, LTR THIS STAGE 11,890 BBLS, TLTR- 133,931 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
20:30	23:00	2.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE Low-TEMP FRAC PLUG @ 15,531' PERF STAGE #33 FROM 15,518'-15,355'. PUMP DOWN VOLUME- 140 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
23:00	03:30	4.5	Wait on Offset well Operations.
03:30	06:00	2.5	FRAC STAGE 34: @ RT
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	October 2, 2018	**API NUMBER**	42495341060000	**REPORT #**	24
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	06:30	0.5	FRAC STAGE 34: RU FRAC CREW AND PT FRAC LINES TO 11878 PSI, FRAC STAGE W/ 2984 GAL 15% HCL, 11,914 BBLS FRAC FLUID, LTR THIS STAGE 12,104 BBLS, TLTR- 146,035 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
06:30	08:30	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 15,914' PERF STAGE #32 FROM 15,738'-15,902'. PUMP DOWN VOLUME- 168 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
08:30	10:45	2.3	NPT WAITING ON REPLACEMENT BLENDER
10:45	13:45	3.0	WO OTHER PAD WELLS
13:45	14:45	1.0	WAIT ON WATER TRANSFER TO SWAP OUT FRESH WATER BOOST PUMP
14:45	17:30	2.8	FRAC STAGE 35:RU FRAC CREW AND PT FRAC LINES TO 11,301 PSI, FRAC STAGE W/ 3,077 GAL 15% HCL, 11,258 BBLS FRAC FLUID, LTR THIS STAGE 11,426 BBLS, TLTR- 157,460 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
17:30	19:30	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 15,148' PERF STAGE #32 FROM 14,959'-15,136'. PUMP DOWN VOLUME- 146 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
19:30	22:00	2.5	Wait On Offset Well Ops.
22:00	00:45	2.8	FRAC STAGE 36:RU FRAC CREW AND PT FRAC LINES TO 11,845 PSI, FRAC STAGE W/ 3,027 GAL 15% HCL, 12,082 BBLS FRAC FLUID, LTR THIS STAGE 12,253 BBLS, TLTR- 169,713 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
00:45	01:00	0.3	Swapping Wells
01:00	02:45	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 14,944' PERF STAGE #37 FROM 14,755'-14,932'. PUMP DOWN VOLUME- 135 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
02:45	06:00	3.3	Wait on Offset Well Operations
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	October 3, 2018	**API NUMBER**	42495341060000	**REPORT #**	25
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	08:30	2.5	FRAC STAGE 37: RU FRAC CREW AND PT FRAC LINES TO 11,749 PSI, FRAC STAGE W/ 2,971 GAL 15% HCL, 11,258 BBLS FRAC FLUID, LTR THIS STAGE 11,421 BBLS, TLTR- 181,135 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
08:30	10:30	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 14,739' PERF STAGE #38 FROM 14,728'-14,548'. PUMP DOWN VOLUME- 140.4 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
10:30	13:30	3.0	SHUT IN, FRAC OPS ON 1H.
13:30	14:15	0.8	REPAIR PUMPS.
14:15	16:45	2.5	FRAC STAGE 38: RU FRAC CREW AND PT FRAC LINES TO 11,599 PSI, FRAC STAGE W/ 2,971 GAL 15% HCL, 10,129 BBLS FRAC FLUID, LTR THIS STAGE 10,294 BBLS, TLTR- 191,429 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
16:45	18:00	1.3	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE MID-TEMP FRAC PLUG @ 14,533' PERF STAGE #39 FROM 14,342'-14,521'. PUMP DOWN VOLUME- 127.0 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
18:00	20:45	2.8	Shut in Frac Ops. 1H / Grease Stack & Rig Lock.
20:45	23:45	3.0	FRAC STAGE 39: RU FRAC CREW AND PT FRAC LINES TO 11,854 PSI, FRAC STAGE W/ 3,078 GAL 15% HCL, 10,861 BBLS FRAC FLUID, LTR THIS STAGE 10,861 BBLS, TLTR- 202,290 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
23:45	01:45	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 14,327' PERF STAGE #40 FROM 14,135'-14,315'. PUMP DOWN VOLUME- 108.0 BBLS POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
01:45	04:30	2.8	Shut in. Frac Operations on the 1H.
04:30	06:00	1.5	Well Open 04:30 Frac Stg#40
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	October 4, 2018	**API NUMBER**	42495341060000	**REPORT #**	26
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	07:00	1.0	COMPLETE FRAC STAGE 40: RU FRAC CREW AND PT FRAC LINES TO 11,858 PSI, FRAC STAGE W/ 2,972 GAL 15% HCL, 11,101 BBLS FRAC FLUID, LTR THIS STAGE 11,229 BBLS, TLTR- 213,519 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
07:00	09:00	2.0	WELL SHUT IN PENDING WIRELINE OPS ON 1H.
09:00	10:30	1.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 14,120' PERF STAGE #41 FROM 13,928'-14,108'. PUMP DOWN VOLUME- 109.0 BBLS POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
10:30	13:00	2.5	WELL SHUT IN PENDING FRAC OPS ON 1H.
13:00	16:30	3.5	FRAC STAGE 41: RU FRAC CREW AND PT FRAC LINES TO 11,500 PSI, FRAC STAGE W/ 2,972 GAL 15% HCL, 11,101 BBLS FRAC FLUID, LTR THIS STAGE 11,229 BBLS, TLTR- 213,519 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
16:30	18:15	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 13,915' PERF STAGE #42 FROM 13,730'-13,901'. PUMP DOWN VOLUME- 96.9 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
18:15	22:30	4.3	WAIT ON OFFSET WELL OPERATIONS
22:30	00:15	1.8	STARTED FRAC STG#42 ON THE 3H
00:15	02:00	1.8	SD DUE LIGHTNING STORM IN THE AREA.
02:00	03:00	1.0	FRAC STAGE 42: RU FRAC CREW AND PT FRAC LINES TO 11,767 PSI, FRAC STAGE W/ 4,033 GAL 15% HCL, 10,602 BBLS FRAC FLUID, LTR THIS STAGE 10,602 BBLS, TLTR- 236,582 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
03:00	04:15	1.3	Grease 1H Frac Stack
04:15	06:00	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 13,715' PERF STAGE #42 FROM 13,533'-13,703'. PUMP DOWN VOLUME- 101 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	October 5, 2018	**API NUMBER**	42495341060000	**REPORT #**	27
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	08:45	2.8	HELD SAFETY MEETING WITH ALL SUPPORTING VENDORS. WAITING ON OFF WELLS OPS.
08:45	13:00	4.3	FRAC STAGE 43: RU FRAC CREW AND PT FRAC LINES TO 11,722 PSI, FRAC STAGE W/ 4,033 GAL 15% HCL, 15,453 BBLS FRAC FLUID, LTR THIS STAGE 15,593 BBLS, TLTR- 252,175 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
13:00	14:45	1.8	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 13,520' PERF STAGE #44 FROM 13,335'-13506'. PUMP DOWN VOLUME- 78.7 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
14:45	17:00	2.3	WAIT ON OFF SET WELL TO FINISH FRACING.
17:00	20:45	3.8	FRAC STAGE 44: RU FRAC CREW AND PT FRAC LINES TO 11,782 PSI, FRAC STAGE W/ 3,975 GAL 15% HCL, 13,599 BBLS FRAC FLUID, LTR THIS STAGE 13,712 BBLS, TLTR- 265,887 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
20:45	22:45	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 13,320' PERF STAGE #44 FROM 13,154'-13,308'. PUMP DOWN VOLUME- 67.3 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
22:45	01:15	2.5	Wait on offset well ops. Frac'n 1H
01:15	04:45	3.5	FRAC STAGE 45: RU FRAC CREW AND PT FRAC LINES TO 11,943 PSI, FRAC STAGE W/ 4,952 GAL 15% HCL, 15,836 BBLS FRAC FLUID, LTR THIS STAGE 15,386 BBLS, TLTR- 281,273 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
04:45	06:00	1.3	Repair Leak on Wireline Tool Trap at report time.
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	October 6, 2018	**API NUMBER**	42495341060000	**REPORT #**	28
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	07:15	1.3	HELD SAFETY MEETING WITH ALL SUPPORTING VENDORS. WL REPAIRED TOOL TRAP.
07:15	08:45	1.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 13,320' PERF STAGE #46 FROM 13,127'-12,974'. PUMP DOWN VOLUME- 58.3 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
08:45	12:30	3.8	FRAC STAGE 46: RU FRAC CREW AND PT FRAC LINES TO 11,875 PSI, FRAC STAGE W/ 4,033 GAL 15% HCL, 12,606 BBLS FRAC FLUID, LTR THIS STAGE 12,606 BBLS, TLTR- 293,879 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
12:30	14:00	1.5	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 12,959' PERF STAGE #47 FROM 12,947'-12,793'. PUMP DOWN VOLUME- 46.7 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
14:00	17:45	3.8	FRAC STAGE 47: RU FRAC CREW AND PT FRAC LINES TO 11,803 PSI, FRAC STAGE W/ 4,537 GAL 15% HCL, 12,145 BBLS FRAC FLUID, LTR THIS STAGE 14,274 BBLS, TLTR- 308,152 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED. NOTE: COULD NOT FINISH FLUSH ON STAGE : 47 DUE TO LIGHTING ON LOCATION, SHUT DOWN FRAC AND WAIT FOR WEATHER TO PASS.
17:45	22:00	4.3	WAIT ON BAD WEATHER AND LIGHTING TO PASS THROUGH.
22:00	00:45	2.8	Pressure Test all flowback iron to 8,350 psi. Opened up Choke manifold on a .25 and watched flow for 15min. Flow rate 0.25 bbls/min. @ 4,300psi. Pressure fell to 0 psi with 0.125 bbls/min on returns. Opened gut line and let flow for another 15 min. Well Broke Circ. @ 1300 psi w/over 20bbls/min. on returns. Flowed approx. a total of 457 bbls. light sand returns.
00:45	03:30	2.8	RU Frac for injection test and flush. Pumped: Average PSI : 6546psi / Average Rate: 49.9 bbls/min: total of 1,370 bbls of clean fluid pumped.
03:30	04:45	1.3	WL RIH TO PERF> STG#48 / Not able to free fall. Kept tagging up @ 560 feet. POOH inspect tool string. 2nd RIH tagged up 4,931 feet. Pulled up to 4,000' feet. Established 2bbl/min RIH to 6,238 feet and tagged up again. POOH. Once off the well inspected tool string and plug. Noticed FR on plug and gun string.
04:45	05:30	0.8	RU Frac to make scour run. Prime Up and Pressure Test / SD due to lighting and heavy rain.
05:30	06:00	0.5	Operations Shutdown due to inclement weather (lightning).
Total Hours		**24.0**	

CASING

Type	OD	ID	Weight	Grade	Bottom MD	Connection	Remarks
Conductor	20	19.000	122.0		95	Welded	
Surface	13-3/8	12.615	54.5	J-55	1,010	STC	110 bbls to surface
Intermediate	10-3/4	9.950	45.5	J-55	5,167	BTC	Good returns throughout, 20 bbls to surface
Intermediate 2	7-5/8	6.880	29.7	HCL-80	11,364	BTC	Full returns, through out job
	5-1/2	4.670	23.0	P-110	22,061	Geo-conn	30 BBLS cmt Returned to surface

TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	

DAILY REPORT

DATE	October 7, 2018	**API NUMBER**	42495341060000	**REPORT #**	29
WELL	UL Spruce 1621-21 3H				
FIELD	WC/BS				
STATE	Texas				

OPERATIONS TIME LOG

From	To	Hrs	
06:00	07:00	1.0	Rigged Up frac for flush and scour run. Pumped: Clean Vol. 2,721bbls / Slurry Vol.2,762 bbls / Avg. PSI 8,781 / Avg. Rate 65.6 / Max PSI 11,344 / MAX Rate: 101 bbls/min / 2,000lbs of 0.10 100mesh / 5,000 lbs of 0.25 100mesh w/371 bbls of flush @ 99 bbls/min.
07:00	09:00	2.0	R/U ROYALTY WL CREW. RIH WITH CCL, PLUG & PERF GUNS. SET MAGNUM DISSOLVABLE LOW-TEMP FRAC PLUG @ 12778' PERF STAGE #48 FROM 12,600-12,764'. PUMP DOWN VOLUME- 30 BBLS. POOH. ALL GUNS FIRED. DROP BALL ON TOP MASTER VALVE.
09:00	12:30	3.5	FRAC STAGE 48: RU FRAC CREW AND PT FRAC LINES TO 11,803 PSI, FRAC STAGE W/ 3,650 GAL 15% HCL, 14,472 BBLS FRAC FLUID, LTR THIS STAGE 14,472 BBLS, TLTR- 325,321 BBLS. GOOD PRESSURE RESPONSE WHEN BALL SEATED.
12:30	06:00	17.5	RDMO LIBERTY FRAC CREW AND ALL SUPPORTING EQUIPMENT. GREASE ALL VALVES ON STACK AND ND GOAT HEAD AND HYDRAULIC FRAC VALVE.
Total Hours		**24.0**	

CASING

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TUBING

Type	OD	ID	Weight	Grade	Btm Pipe MD	Length	Remarks

SAFETY

Safety Meeting Topic					
Last BOP Test		**BOP Test Due**		**Accidents**	