

**Date:** 22-Dec-14

<b>Well Name:</b> NGL C1C		<b>Location:</b> SEC8, T4N, R64W		<b>Customer Rep:</b> IRVIN MORSE		<b>Field Order #</b> 18431A	
<b>Stage:</b>		<b>Formation:</b> LYONS		<b>Treat Via:</b> CASING		<b>Allowable Pressure</b> Tbg Csg 4,500	
<b>County:</b> WELD		<b>State:</b> CO		<b>Well Age:</b> NEW		<b>PackerType:</b> <b>PackerDepth:</b> <b>Csg Size:</b> 7	
<b>Type Of Service:</b> ROCK SALT W/ ACID		<b>Csg Depth</b> 8,904		<b>Tbg Size:</b>		<b>Tbg Depth:</b> <b>Liner Size:</b> 4.5	
<b>Customer Name:</b> NGL WATER SOLUTIONS		<b>Liner Depth:</b> 8,900		<b>Liner Top:</b> 8,905		<b>Liner Bot:</b> 10,737 <b>Total Depth:</b> 10,729	
<b>Address:</b>		<b>Open Hole:</b>		<b>Csg Vol:</b> 343		<b>BHT:</b>	
<b>Remarks:</b> SAFETY MEETING PRESSURE TEST TO 5000 PUMPED 2400 # OF ROCK SALT PUMPED 119 BBLS OF HCL PUMPED 675 BBLS OF CUSTOMERS FULDED		<b>Perf Depths:</b> 8961 9182 9405 9700 10005 10227		<b>Perfs:</b> 9006 9227 9449 9713 10018 10240		<b>TotalPerfs:</b> 0 0 0 0 0 0	

TIME	INJECTION RATE		PRESSURE		REMARKS	PROP (lbs)	FOAM/FLD (gls)	FLUID (bbls)
	FLUID	N2/CO2	STP	ANNULUS				
8:13	-0.1		170		SATETY MEETING	0	0	0.0
8:13	5.9		61		PSI TEST	0	0	0.0
8:13	8.0		52		ST PUMP IN	0	1,386	33.0
8:15	11.6		10		ST ACID	0	1,250	30.0
8:17	8.0		644		ST ROCK SALT	0	1,000	24.0
8:20	8.9		740		ST ACID	0	1,250	30.0
8:22	9.7		839		ST ROCK SALT	0	1,000	24.0
8:25	8.0		933		ST ACID	0	1,250	30.0
8:27	9.5		876		ST ROCK SALT	0	1,000	24.0
8:30	8.7		886		ST ACID	0	1,250	30.0
8:33	22.3		1065		ST FLUSH	0	18,900	450.0
8:36	39.7		1892		INCREASED RATE TO 40 BPM	0	0	0.0
8:40	40.4		1743		ACID ON	0	0	0.0
8:46	2.8		25		ISIP = VAC	0	0	0.0
<b>Total:</b>						0	28,286	675.0

**Summary**

Max Fl. Rate	Avg Fl. Rate	Max Psi	Avg Psi
40.4	17.7	1,905	916

Customer Acknowledgement:

Service Rating:

- ☐ Satisfactory  
☐ Unsatisfactory

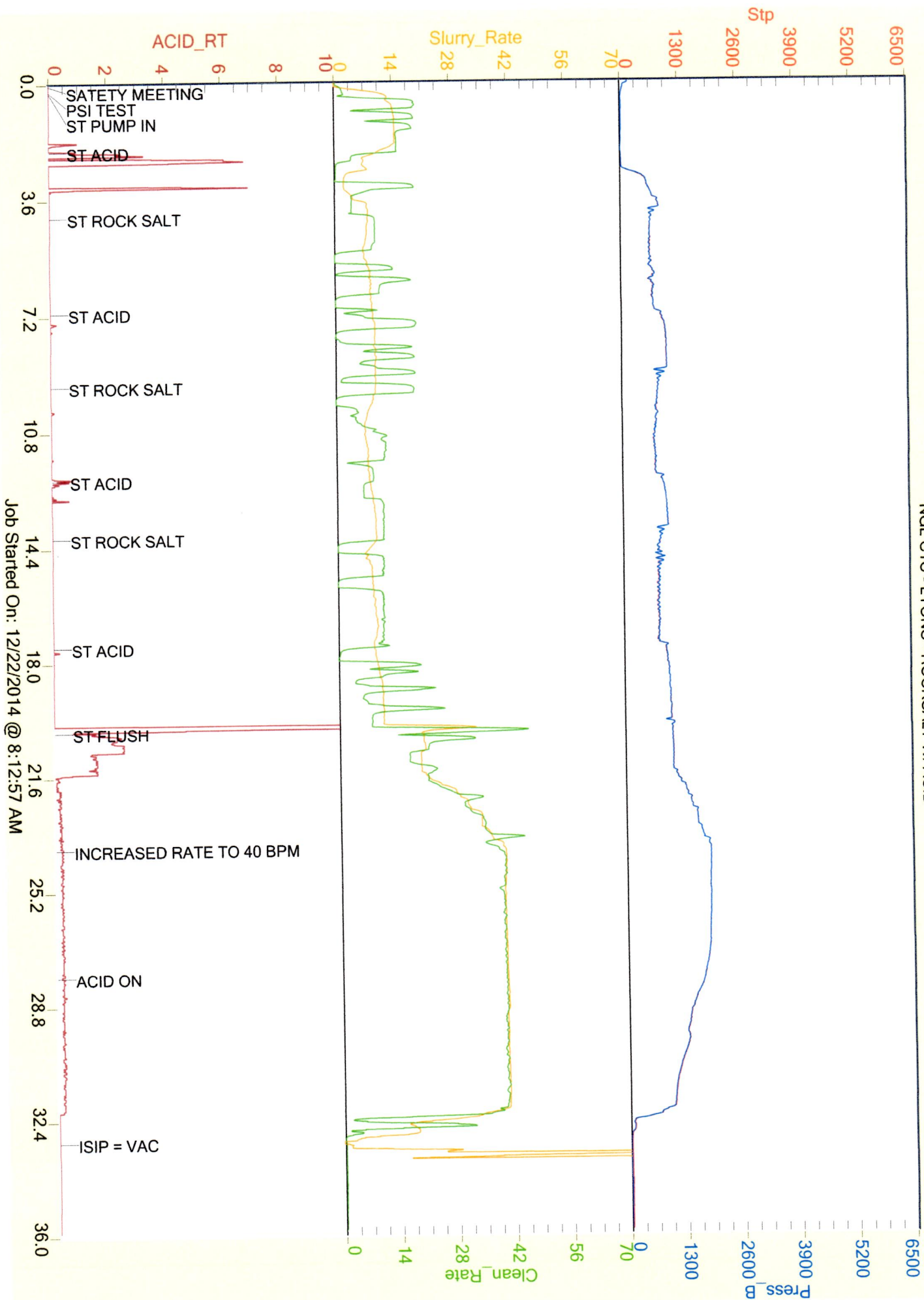
Treater:

QUINN

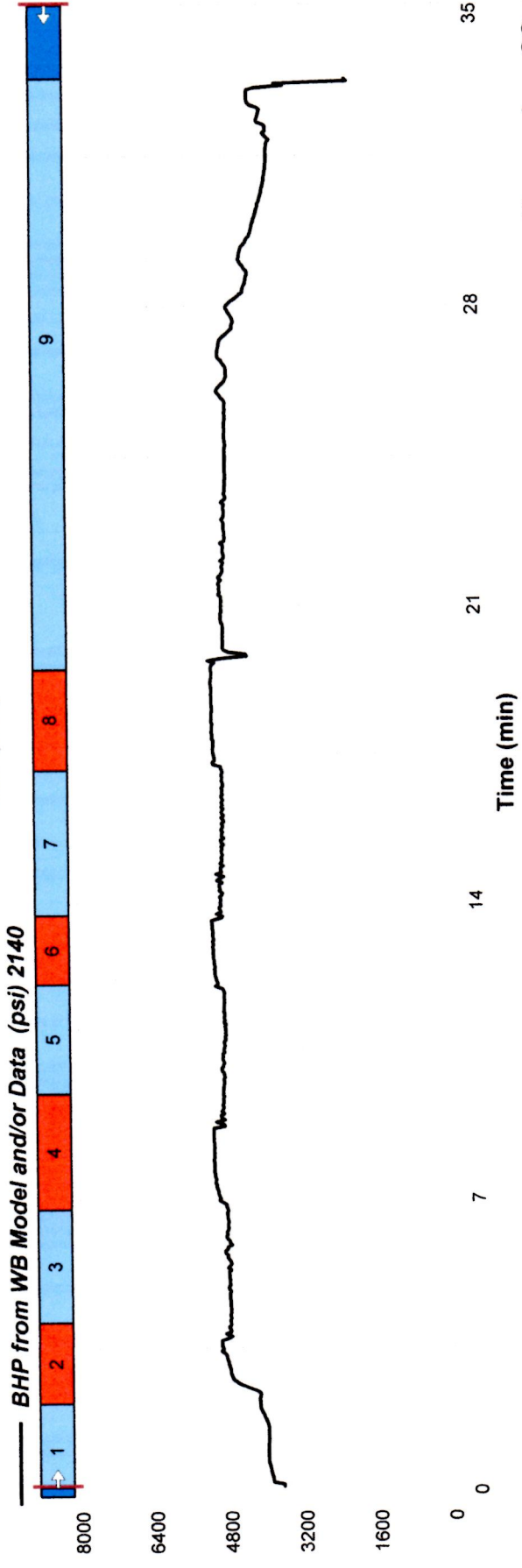
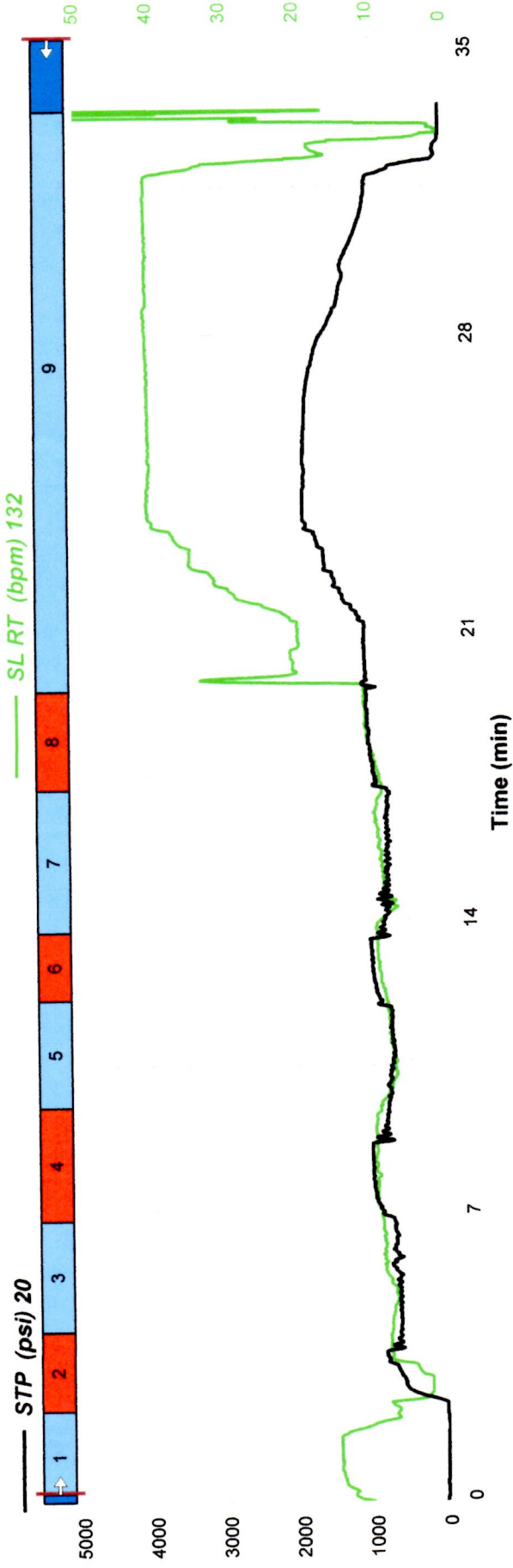
**PRODUCTS USED**

S-3, IC-100, ACID INHIB-10, HCL, WATER, ROCK SALT

**NGL WATER SOLUTIONS**  
NGL C1C - LYONS - ROCKSALT W/ ACID



# NGL WATER DISPOSAL DJ LLC NGL C1C



SEC. 8- T4N- R64W LYONS

December 22, 2014



Date: 22-Dec-14

Well Name:	Location:	Customer Rep:	Field Order #
NGL C1C	SEC8, T4N, R64W	IRVIN MORSE	18431B
Stage:	Formation:	Treat Via:	Allowable Pressure Tbg Csg Well Type:
	LYONS	CASING	4,500 INJECTION
County:	State:	Well Age:	PackerType: PackerDepth: Csg Size:
WELD	CO	NEW	7
Type Of Service:	STEP RATE TEST		
Customer Name:	NGL WATER SOLUTIONS		
Address:			
Remarks:	SAFETY MEETING PRESSURE TEST TO 5000 PSI PUMPED 2450 BBLs OF CUSTOMER'S FLUID ISIP = VAC		
Csg Depth	Tbg Size:	Tbg Depth:	Liner Size:
8,904			4.5
Liner Depth:	Liner Top:	Liner Bot:	Total Depth:
8,900	8,905	10,737	10,729
Open Hole:	Csg Vol:	BHT:	
	343		
Perf Depths:	Perfs:	TotalPerfs:	
8961	9006	0	0
9182	9227	0	
9405	9449	0	
9700	9713	0	
10005	10018	0	
10227	10240	0	
		0	

TIME	INJECTION RATE		PRESSURE		REMARKS	PROP (lbs)	FOAM/FLD (gls)	FLUID (bbls)
	FLUID	N2/CO2	STP	ANNULUS				
12:11	0.8		114		PSI TEST	0	0	0.0
12:11	0.2		92		ST PUMP IN	0	25,200	600.0
12:37	22.0		41		RATE 22 BPM	0	0	0.0
12:39	26.3		199		INCREASED RATE TO 27 BPM	0	12,600	300.0
12:51	32.1		518		INCREASED RATE TO 32 BPM	0	16,800	400.0
13:04	40.0		1000		INCREASED RATE TO 40 BPM	0	48,174	1,147.0
13:34	0.0		-9		ISIP = VAC	0	0	0.0
Total:						0	102,774	2,447.0

## Summary

Max Fl. Rate	Avg Fl. Rate	Max Psi	Avg Psi
40.0	30.2	1,178	527

Customer Acknowledgement:

Service Rating:

- ☐ Satisfactory  
☐ Unsatisfactory

Treater:

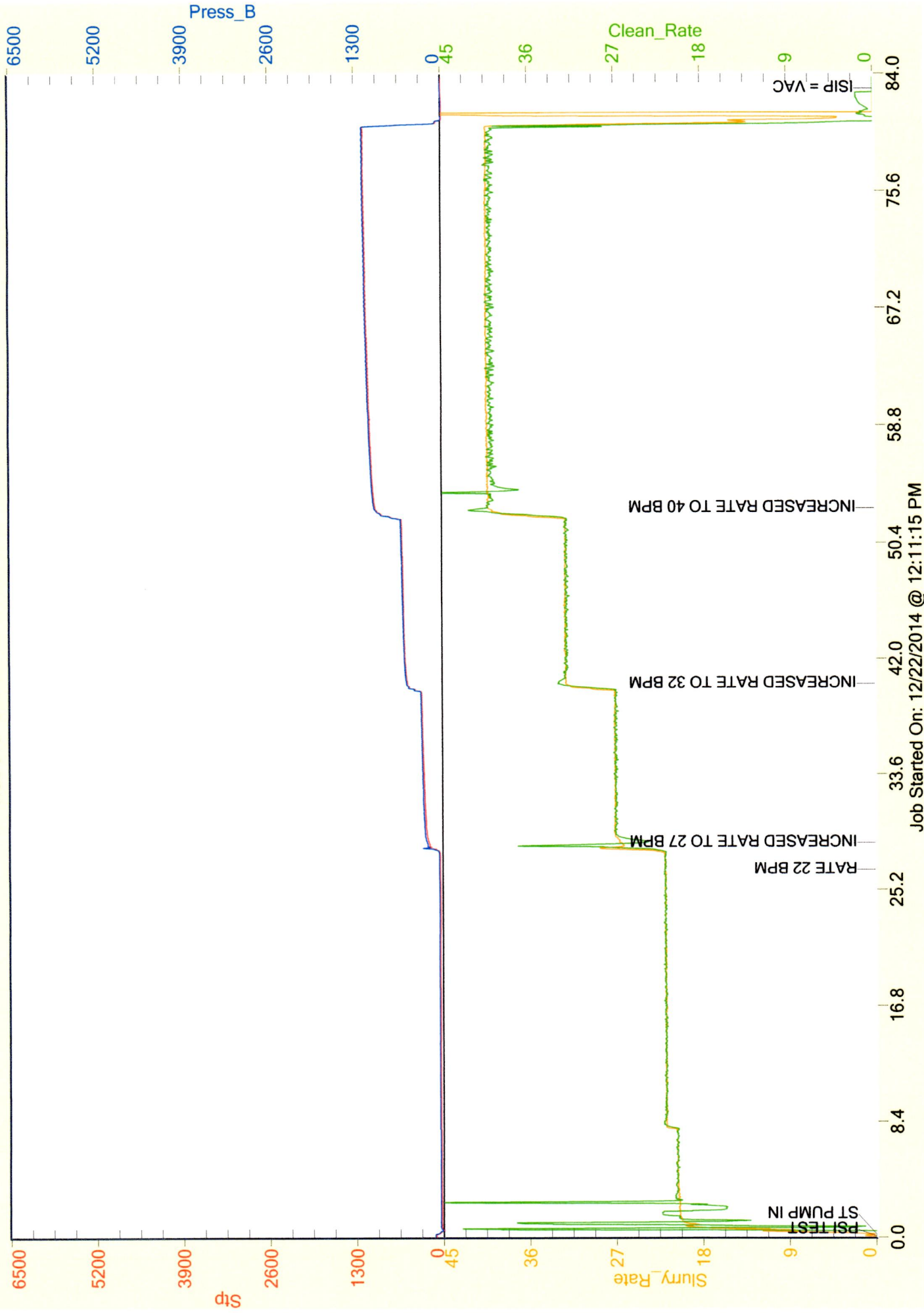
QUINN

## PRODUCTS USED

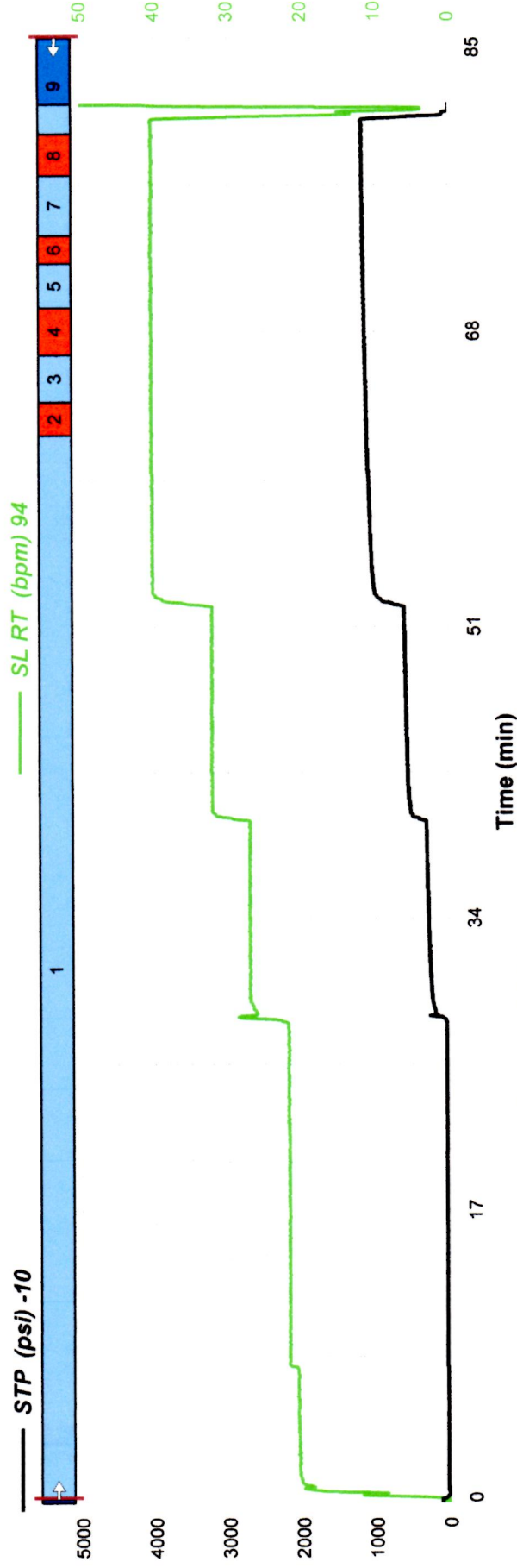
CUSTOMER PROVIDED FLUID

# NGL WATER SOLUTIONS

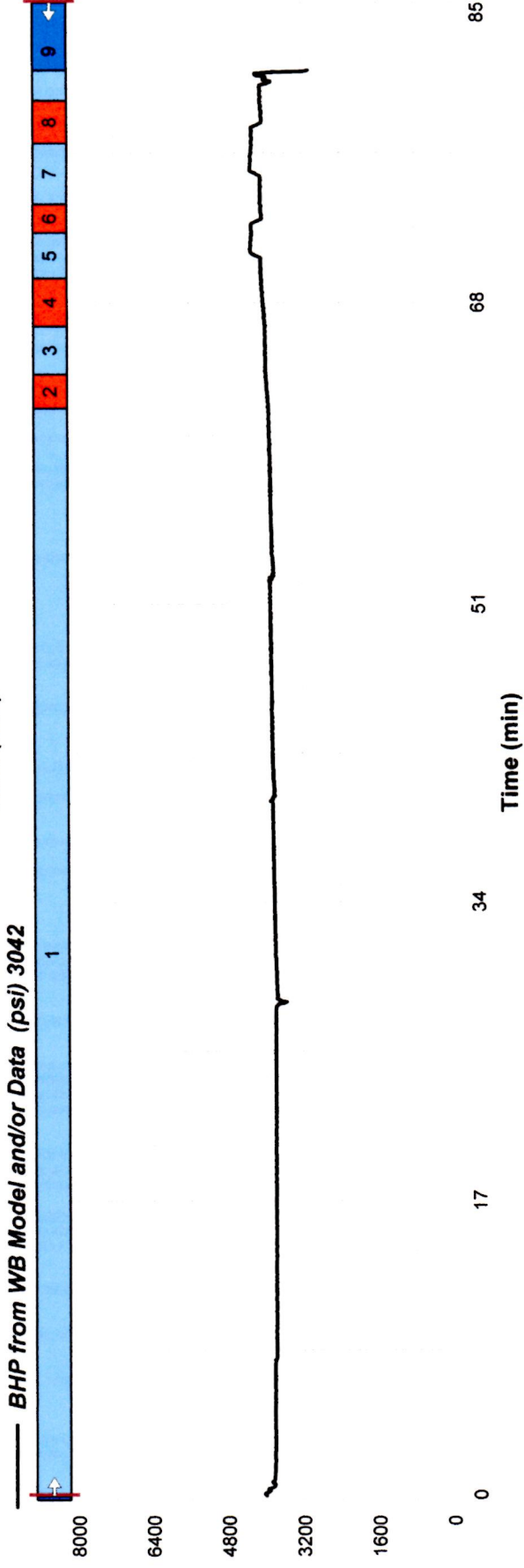
NGL C1C - LYONS - STEP RATE TEST



# NGL WATER DISPOSAL DJ LLC NGL C1C STEP RATE TEST



BHP from WB Model and/or Data (psi) 3042



SEC. 8- T4N- R64W LYONS

December 22, 2014