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 1220 S. St. Francis Dr., Santa Fe, NM
 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-48081
1. Type of Well: Oil Well ☐ Gas Well ☐ Other: Acid Gas Injection Well ☒		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator Ameredev Operating, LLC		6. State Oil & Gas Lease No.
3. Address of Operator 2901 Via Fortuna, Ste. 600, Austin, TX 78746		7. Lease Name or Unit Agreement Name Independence AGI
4. Well Location Unit Letter <u>C</u> : <u>829</u> feet from the NORTH line and <u>1,443</u> feet from the EAST line Section <u>20</u> Township <u>25S</u> Range <u>36E</u> NMPM County <u>Lea</u>		8. Well Number 1
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,103 (GR)		9. OGRID Number 372224
		10. Pool name or Wildcat AGI: Devonian/Fusselman

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☐
DOWNHOLE COMMINGLE ☐	P AND A ☐
CLOSED-LOOP SYSTEM ☐	CASING/CEMENT JOB ☒
OTHER: ☐	OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion. This well is permitted under NMOCC Order #R-21455-A as a UIC Class II AGI well.

The 17.5-inch borehole was drilled to 7,240 feet from January 16 to 22, 2021, and the 13 5/8-inch 2nd Intermediate Casing was installed on January 25 and 26, 2021. The casing float shoe was set at 7,150 feet and cemented in three stages as indicated below. Two external casing packers (ECPs) were used to isolate the Capitan Reef. Cement densities range from 11.5 to 14.8 lb./gal and cement was circulated to the surface following each stage with 207 sacks on the final stage. The casing tally, cement lab. report, cementing activity report, BOPE testing charts, casing test/FIT results, and an updated well diagram are attached. A CBL was submitted via NMOCD EDocs site.

Casing	Joints	Size	Wt. (lb/ft)	Grade	Threads	Set Depth	Cement	Type/Class	Sacks	Yield
2 nd Intern.	179	13.625"	88.2	Q-125	BTC	0 – 7,150	Stage 1 Tail	VersaCem	991	1.456
							Stage 2 Lead	NeoCem	434	2.240
							Stage 2 Tail	VersaCem	100	1.170
							Stage 3 Lead	EconoCem	1,995	1.900
							Stage 3 Tail	HalCem	100	1.330

ECP	Top (Ft)	DVT	Top (Ft)
#2	3,822	#2	3,819
#1	5,353	#1	5,350

Upon completing the CBL, the BOPE for the 3rd Intermediate Casing section was installed and successfully tested. The casing was tested above and between the DVTs and an FIT was performed after drilling 10 feet into the new formation.

Spud Date: December 27, 2020

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Dale Littlejohn TITLE Consultant to Ameredev DATE February 5, 2021

Type or print name Dale Littlejohn E-mail address: dale@geolex.com PHONE: 505-842-8000

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

Date: 1.26.2021 Hole TD: 7240 Csg Specs @: 13 5/8" 88.2# Q-125 (BTC) Casing Set @: 7150												
Short Joint #1			Short Joint #2			Short Joint #3						
Weight	Running Order	Length	Running Depth ft/RKB	Landed Depth, top ft/RKB	Landed Depth, bttm ft/RKB	Capacity per jt bbls	Disp per jt bbls	Running Capacity bbls	Running CL Disp bbls	Strokes to fill	Running Ann Vol bbls	Running OP Disp bbls
88.2	FS	2.29	2.29	7147.71	7150.00	0.35	0.06	0.35	0.40	3.87	0.28	0.06
88.2	1	40.94	43.23	7106.77	7147.71	6.33	0.98	6.68	7.51	73.12	5.35	1.04
88.2	2	39.32	82.55	7067.45	7106.77	6.08	0.95	12.76	14.35	139.62	10.21	1.99
88.2	FC	2.81	85.36	7064.64	7067.45	0.43	0.07	13.20	14.83	144.38	10.56	2.05
88.2	3	38.58	123.94	7026.06	7064.64	5.96	0.93	19.16	21.54	209.63	15.33	2.98
88.2	4	40.25	164.19	6985.81	7026.06	6.22	0.97	25.38	28.53	277.71	20.31	3.95
88.2	5	40.95	205.14	6944.86	6985.81	6.33	0.98	31.71	35.65	346.97	25.38	4.93
88.2	6	37.1	242.24	6907.76	6944.86	5.74	0.89	37.45	42.10	409.72	29.97	5.83
88.2	7	40.3	282.54	6867.46	6907.76	6.23	0.97	43.68	49.10	477.89	34.96	6.80
88.2	8	39.21	321.75	6828.25	6867.46	6.06	0.94	49.74	55.91	544.21	39.81	7.74
88.2	9	39.6	361.35	6788.65	6828.25	6.12	0.95	55.86	62.80	611.18	44.71	8.69
88.2	10	39.25	400.60	6749.40	6788.65	6.07	0.94	61.93	69.62	677.57	49.56	9.63
88.2	11	40.35	440.95	6709.05	6749.40	6.24	0.97	68.17	76.63	745.82	54.56	10.61
88.2	12	39.85	480.80	6669.20	6709.05	6.16	0.96	74.33	83.55	813.22	59.49	11.56
88.2	13	37.58	518.38	6631.62	6669.20	5.81	0.90	80.14	90.08	876.78	64.13	12.47
88.2	14	40.05	558.43	6591.57	6631.62	6.19	0.96	86.33	97.04	944.52	69.09	13.43
88.2	15	40.28	598.71	6551.29	6591.57	6.23	0.97	92.56	104.04	1012.65	74.07	14.40
88.2	16	39.14	637.85	6512.15	6551.29	6.05	0.94	98.61	110.85	1078.85	78.92	15.34
88.2	17	40	677.85	6472.15	6512.15	6.18	0.96	104.79	117.80	1146.51	83.86	16.30
88.2	18	39.75	717.60	6432.40	6472.15	6.15	0.96	110.94	124.71	1213.74	88.78	17.26
88.2	19	40.9	758.50	6391.50	6432.40	6.32	0.98	117.26	131.81	1282.92	93.84	18.24
88.2	20	40.82	799.32	6350.68	6391.50	6.31	0.98	123.57	138.91	1351.96	98.89	19.22
88.2	21	36.75	836.07	6313.93	6350.68	5.68	0.88	129.25	145.29	1414.12	103.44	20.11
88.2	22	40.01	876.08	6273.92	6313.93	6.19	0.96	135.44	152.25	1481.79	108.39	21.07
88.2	23	39.04	915.12	6234.88	6273.92	6.04	0.94	141.47	159.03	1547.83	113.22	22.01
88.2	24	40.88	956.00	6194.00	6234.88	6.32	0.98	147.79	166.14	1616.97	118.28	22.99
88.2	25	40.39	996.39	6153.61	6194.00	6.24	0.97	154.04	173.15	1685.29	123.28	23.96
88.2	26	36.01	1032.40	6117.60	6153.61	5.57	0.87	159.60	179.41	1746.19	127.73	24.83
88.2	27	37.08	1069.48	6080.52	6117.60	5.73	0.89	165.33	185.86	1808.91	132.32	25.72
88.2	28	37.37	1106.85	6043.15	6080.52	5.78	0.90	171.11	192.35	1872.12	136.94	26.62
88.2	29	40	1146.85	6003.15	6043.15	6.18	0.96	177.30	199.30	1939.77	141.89	27.58
88.2	30	40.14	1186.99	5963.01	6003.15	6.21	0.97	183.50	206.28	2007.66	146.86	28.55
88.2	31	40.31	1227.30	5922.70	5963.01	6.23	0.97	189.73	213.28	2075.84	151.84	29.52
88.2	32	40.6	1267.90	5882.10	5922.70	6.28	0.98	196.01	220.34	2144.52	156.87	30.49
88.2	33	40.43	1308.33	5841.67	5882.10	6.25	0.97	202.26	227.36	2212.90	161.87	31.47
88.2	34	37.97	1346.30	5803.70	5841.67	5.87	0.91	208.13	233.96	2277.12	166.57	32.38
88.2	35	38.94	1385.24	5764.76	5803.70	6.02	0.94	214.15	240.73	2342.98	171.38	33.32
88.2	36	40.33	1425.57	5724.43	5764.76	6.23	0.97	220.38	247.74	2411.20	176.37	34.29
88.2	37	38.71	1464.28	5685.72	5724.43	5.98	0.93	226.37	254.46	2476.67	181.16	35.22
88.2	38	39.66	1503.94	5646.06	5685.72	6.13	0.95	232.50	261.36	2543.75	186.07	36.17
88.2	39	39.25	1543.19	5606.81	5646.06	6.07	0.94	238.57	268.18	2610.14	190.93	37.12
88.2	40	39.55	1582.74	5567.26	5606.81	6.11	0.95	244.68	275.05	2677.03	195.82	38.07
88.2	41	40.22	1622.96	5527.04	5567.26	6.22	0.97	250.90	282.04	2745.06	200.80	39.03
88.2	42	39.59	1662.55	5487.45	5527.04	6.12	0.95	257.02	288.92	2812.02	205.69	39.99
88.2	43	39.2	1701.75	5448.25	5487.45	6.06	0.94	263.08	295.73	2878.33	210.54	40.93
88.2	44	39.53	1741.28	5408.72	5448.25	6.11	0.95	269.19	302.60	2945.19	215.43	41.88
88.2	45	38.31	1779.59	5370.41	5408.72	5.92	0.92	275.11	309.26	3009.98	220.17	42.80
88.2	ECP	17.36	1796.95	5353.05	5370.41	2.68	0.42	277.80	312.28	3039.35	222.32	43.22
88.2	DVTH	2.7	1799.65	5350.35	5353.05	0.42	0.06	278.21	312.75	3043.91	222.66	43.28
88.2	Pup	8.2	1807.85	5342.15	5350.35	1.27	0.20	279.48	314.17	3057.78	223.67	43.48
88.2	46	39.03	1846.88	5303.12	5342.15	6.03	0.94	285.52	320.95	3123.80	228.50	44.42
88.2	47	38.19	1885.07	5264.93	5303.12	5.90	0.92	291.42	327.59	3188.39	233.22	45.34
88.2	48	39.01	1924.08	5225.92	5264.93	6.03	0.94	297.45	334.37	3254.37	238.05	46.28
88.2	49	40.61	1964.69	5185.31	5225.92	6.28	0.98	303.73	341.43	3323.06	243.08	47.25
88.2	50	40.23	2004.92	5145.08	5185.31	6.22	0.97	309.95	348.42	3391.10	248.05	48.22
88.2	51	40.71	2045.63	5104.37	5145.08	6.29	0.98	316.24	355.49	3459.96	253.09	49.20
88.2	52	40.04	2085.67	5064.33	5104.37	6.19	0.96	322.43	362.45	3527.68	258.04	50.16
88.2	53	38.44	2124.11	5025.89	5064.33	5.94	0.92	328.37	369.13	3592.70	262.80	51.09
88.2	54	40.94	2165.05	4984.95	5025.89	6.33	0.98	334.70	376.25	3661.95	267.86	52.07
88.2	55	38.76	2203.81	4946.19	4984.95	5.99	0.93	340.69	382.98	3727.51	272.66	53.00
88.2	56	38.44	2242.25	4907.75	4946.19	5.94	0.92	346.64	389.66	3792.52	277.42	53.93
88.2	57	39.91	2282.16	4867.84	4907.75	6.17	0.96	352.81	396.60	3860.03	282.35	54.89
88.2	58	39.09	2321.25	4828.75	4867.84	6.04	0.94	358.85	403.39	3926.14	287.19	55.83
88.2	59	37.54	2358.79	4791.21	4828.75	5.80	0.90	364.65	409.91	3989.64	291.83	56.73
88.2	60	40.7	2399.49	4750.51	4791.21	6.29	0.98	370.94	416.99	4058.48	296.87	57.71
88.2	61	40.92	2440.41	4709.59	4750.51	6.33	0.98	377.27	424.10	4127.69	301.93	58.70
88.2	62	38.72	2479.13	4670.87	4709.59	5.99	0.93	383.26	430.83	4193.18	306.72	59.63
88.2	63	40.34	2519.47	4630.53	4670.87	6.24	0.97	389.49	437.84	4261.41	311.71	60.60
88.2	64	39.99	2559.46	4590.54	4630.53	6.18	0.96	395.68	444.79	4329.05	316.66	61.56
88.2	65	40.19	2599.65	4550.35	4590.54	6.21	0.97	401.89	451.77	4397.03	321.63	62.52
88.2	66	39.4	2639.05	4510.95	4550.35	6.09	0.95	407.98	458.62	4463.67	326.51	63.47
88.2	67	38.94	2677.99	4472.01	4510.95	6.02	0.94	414.00	465.38	4529.53	331.33	64.41
88.2	68	39.33	2717.32	4432.68	4472.01	6.08	0.95	420.08	472.22	4596.05	336.19	65.36
88.2	69	38.63	2755.95	4394.05	4432.68	5.97	0.93	426.05	478.93	4661.39	340.97	66.28
88.2	70	39.37	2795.32	4354.68	4394.05	6.09	0.95	432.14	485.77	4727.98	345.84	67.23
88.2	71	40.76	2836.08	4313.92	4354.68	6.30	0.98	438.44	492.86	4796.92	350.89	68.21
88.2	72	40.25	2876.33	4273.67	4313.92	6.22	0.97	444.66	499.85	4865.00	355.87	69.18

88.2	73	39.44	2915.77	4234.23	4273.67	6.10	0.95	450.76	506.71	4931.71	360.74	70.13
88.2	74	39.84	2955.61	4194.39	4234.23	6.16	0.96	456.92	513.63	4999.09	365.67	71.09
88.2	75	38.97	2994.58	4155.42	4194.39	6.02	0.94	462.94	520.40	5065.01	370.50	72.02
88.2	76	39.69	3034.27	4115.73	4155.42	6.14	0.95	469.08	527.30	5132.14	375.41	72.98
88.2	77	39.81	3074.08	4075.92	4115.73	6.15	0.96	475.23	534.22	5199.47	380.33	73.94
88.2	78	39.13	3113.21	4036.79	4075.92	6.05	0.94	481.28	541.02	5265.66	385.17	74.88
88.2	79	40.86	3154.07	3995.93	4036.79	6.32	0.98	487.60	548.12	5334.77	390.23	75.86
88.2	80	38.66	3192.73	3957.27	3995.93	5.98	0.93	493.57	554.84	5400.16	395.01	76.79
88.2	81	39.27	3232.00	3918.00	3957.27	6.07	0.94	499.65	561.66	5466.58	399.87	77.73
88.2	82	38.79	3270.79	3879.21	3918.00	6.00	0.93	505.64	568.40	5532.19	404.67	78.67
88.2	83	40.1	3310.89	3839.11	3879.21	6.20	0.96	511.84	575.37	5600.01	409.63	79.63
88.2	ECP	17.35	3328.24	3821.76	3839.11	2.68	0.42	514.52	578.39	5629.36	411.78	80.05
88.2	DVTH	2.86	3331.10	3818.90	3821.76	0.44	0.07	514.97	578.88	5634.19	412.13	80.12
88.2	Pup	7.9	3339.00	3811.00	3818.90	1.22	0.19	516.19	580.26	5647.56	413.11	80.31
88.2	84	38.04	3377.04	3772.96	3811.00	5.88	0.91	522.07	586.87	5711.90	417.81	81.22
88.2	85	40.84	3417.88	3732.12	3772.96	6.31	0.98	528.38	593.96	5780.97	422.87	82.20
88.2	86	38.93	3456.81	3693.19	3732.12	6.02	0.94	534.40	600.73	5846.82	427.68	83.14
88.2	87	40.26	3497.07	3652.93	3693.19	6.22	0.97	540.62	607.73	5914.91	432.66	84.11
88.2	88	39.77	3536.84	3613.16	3652.93	6.15	0.96	546.77	614.64	5982.18	437.58	85.07
88.2	89	40.77	3577.61	3572.39	3613.16	6.30	0.98	553.07	621.72	6051.14	442.63	86.05
88.2	90	37.01	3614.62	3535.38	3572.39	5.72	0.89	558.80	628.15	6113.74	447.21	86.94
88.2	91	40.46	3655.08	3494.92	3535.38	6.25	0.97	565.05	635.19	6182.17	452.21	87.91
88.2	92	39.96	3695.04	3454.96	3494.92	6.18	0.96	571.23	642.13	6249.76	457.16	88.87
88.2	93	38.57	3733.61	3416.39	3454.96	5.96	0.93	577.19	648.83	6315.00	461.93	89.80
88.2	94	40.49	3774.10	3375.90	3416.39	6.26	0.97	583.45	655.87	6383.48	466.94	90.77
88.2	95	41.11	3815.21	3334.79	3375.90	6.36	0.99	589.81	663.01	6453.01	472.03	91.76
88.2	96	41.01	3856.22	3293.78	3334.79	6.34	0.99	596.15	670.14	6522.38	477.10	92.75
88.2	97	40.23	3896.45	3253.55	3293.78	6.22	0.97	602.36	677.13	6590.42	482.08	93.71
88.2	98	39.37	3935.82	3214.18	3253.55	6.09	0.95	608.45	683.97	6657.01	486.95	94.66
88.2	99	38.81	3974.63	3175.37	3214.18	6.00	0.93	614.45	690.72	6722.66	491.75	95.59
88.2	100	40.11	4014.74	3135.26	3175.37	6.20	0.96	620.65	697.69	6790.50	496.71	96.56
88.2	101	39.42	4054.16	3095.84	3135.26	6.09	0.95	626.75	704.54	6857.17	501.59	97.51
88.2	102	40.48	4094.64	3055.36	3095.84	6.26	0.97	633.00	711.57	6925.64	506.60	98.48
88.2	103	40.06	4134.70	3015.30	3055.36	6.19	0.96	639.20	718.53	6993.40	511.55	99.44
88.2	104	39.84	4174.54	2975.46	3015.30	6.16	0.96	645.36	725.46	7060.78	516.48	100.40
88.2	105	39.64	4214.18	2935.82	2975.46	6.13	0.95	651.48	732.35	7127.83	521.39	101.36
88.2	106	39.78	4253.96	2896.04	2935.82	6.15	0.96	657.63	739.26	7195.11	526.31	102.31
88.2	107	37.43	4291.39	2858.61	2896.04	5.79	0.90	663.42	745.76	7258.42	530.94	103.21
88.2	108	39.44	4330.83	2819.17	2858.61	6.10	0.95	669.52	752.62	7325.13	535.82	104.16
88.2	109	39.65	4370.48	2779.52	2819.17	6.13	0.95	675.65	759.51	7392.19	540.72	105.12
88.2	110	40.08	4410.56	2739.44	2779.52	6.20	0.96	681.84	766.47	7459.98	545.68	106.08
88.2	111	40.58	4451.14	2698.86	2739.44	6.27	0.98	688.12	773.53	7528.62	550.70	107.06
88.2	112	39.82	4490.96	2659.04	2698.86	6.16	0.96	694.27	780.45	7595.97	555.63	108.01
88.2	113	38.8	4529.76	2620.24	2659.04	6.00	0.93	700.27	787.19	7661.60	560.43	108.95
88.2	114	38.82	4568.58	2581.42	2620.24	6.00	0.93	706.27	793.93	7727.26	565.23	109.88
88.2	115	40.2	4608.78	2541.22	2581.42	6.21	0.97	712.49	800.92	7795.25	570.21	110.85
88.2	116	37.92	4646.70	2503.30	2541.22	5.86	0.91	718.35	807.51	7859.39	574.90	111.76
88.2	117	39.84	4686.54	2463.46	2503.30	6.16	0.96	724.51	814.43	7926.77	579.83	112.72
88.2	118	38.81	4725.35	2424.65	2463.46	6.00	0.93	730.51	821.18	7992.42	584.63	113.65
88.2	119	38.54	4763.89	2386.11	2424.65	5.96	0.93	736.46	827.88	8057.60	589.40	114.58
88.2	120	40.03	4803.92	2346.08	2386.11	6.19	0.96	742.65	834.83	8125.31	594.35	115.54
88.2	121	40.35	4844.27	2305.73	2346.08	6.24	0.97	748.89	841.84	8193.56	599.34	116.51
88.2	122	39.64	4883.91	2266.09	2305.73	6.13	0.95	755.02	848.73	8260.60	604.25	117.46
88.2	123	38.95	4922.86	2227.14	2266.09	6.02	0.94	761.04	855.50	8326.48	609.07	118.40
88.2	124	39.56	4962.42	2187.58	2227.14	6.12	0.95	767.16	862.38	8393.40	613.96	119.35
88.2	125	39.45	5001.87	2148.13	2187.58	6.10	0.95	773.26	869.23	8460.12	618.84	120.30
88.2	126	40.04	5041.91	2108.09	2148.13	6.19	0.96	779.44	876.19	8527.84	623.79	121.26
88.2	127	40.55	5082.46	2067.54	2108.09	6.27	0.98	785.71	883.24	8596.43	628.81	122.24
88.2	128	40.55	5123.01	2026.99	2067.54	6.27	0.98	791.98	890.28	8665.02	633.83	123.22
88.2	129	39.9	5162.91	1987.09	2026.99	6.17	0.96	798.15	897.22	8732.50	638.77	124.17
88.2	130	40.15	5203.06	1946.94	1987.09	6.21	0.97	804.36	904.20	8800.41	643.73	125.14
88.2	131	40.2	5243.26	1906.74	1946.94	6.21	0.97	810.57	911.18	8868.41	648.71	126.11
88.2	132	39.78	5283.04	1866.96	1906.74	6.15	0.96	816.72	918.09	8935.69	653.63	127.06
88.2	133	40.8	5323.84	1826.16	1866.96	6.31	0.98	823.03	925.18	9004.70	658.68	128.05
88.2	134	39.2	5363.04	1786.96	1826.16	6.06	0.94	829.09	932.00	9071.00	663.53	128.99
88.2	135	39.84	5402.88	1747.12	1786.96	6.16	0.96	835.25	938.92	9138.39	668.45	129.95
88.2	136	39.81	5442.69	1707.31	1747.12	6.15	0.96	841.40	945.84	9205.72	673.38	130.90
88.2	137	40.99	5483.68	1666.32	1707.31	6.34	0.99	847.74	952.96	9275.05	678.45	131.89
88.2	138	39.98	5523.66	1626.34	1666.32	6.18	0.96	853.92	959.91	9342.67	683.40	132.85
88.2	139	38.89	5562.55	1587.45	1626.34	6.01	0.94	859.93	966.67	9408.45	688.21	133.79
88.2	140	40.41	5602.96	1547.04	1587.45	6.25	0.97	866.18	973.69	9476.80	693.21	134.76
88.2	141	39.22	5642.18	1507.82	1547.04	6.06	0.94	872.24	980.51	9543.14	698.06	135.70
88.2	142	39.85	5682.03	1467.97	1507.82	6.16	0.96	878.40	987.43	9610.54	702.99	136.66
88.2	143	40.73	5722.76	1427.24	1467.97	6.30	0.98	884.70	994.51	9679.43	708.03	137.64
88.2	144	38.81	5761.57	1388.43	1427.24	6.00	0.93	890.70	1001.25	9745.07	712.83	138.57
88.2	145	36.83	5798.40	1351.60	1388.43	5.69	0.89	896.39	1007.65	9807.36	717.39	139.46
88.2	146	40.32	5838.72	1311.28	1351.60	6.23	0.97	902.63	1014.66	9875.56	722.38	140.43
88.2	147	40.25	5878.97	1271.03	1311.28	6.22	0.97	908.85	1021.66	9943.64	727.36	141.40
88.2	148	40.1	5919.07	1230.93	1271.03	6.20	0.96	915.05	1028.62	10011.46	732.32	142.36
88.2	149	40.4	5959.47	1190.53	1230.93	6.25	0.97	921.29	1035.65	10079.80	737.32	143.33
88.2	150	39.3	5998.77	1151.23	1190.53	6.08	0.95	927.37	1042.47	10146.27	742.18	144.28
88.2	151	39.95	6038.72	1111.28	1151.23	6.18	0.96	933.54	1049.42	10213.84	747.12	145.24
88.2	152	40.13	6078.85	1071.15	1111.28	6.20	0.97	939.75	1056.39	10281.72	752.09	146.20
88.2	153	40.32	6119.17	1030.83	1071.15	6.23	0.97	945.98	1063.40	10349.91	757.08	147.17
88.2	154	38.6	6157.77	992.23	1030.83	5.97	0.93	951.95	1070.11	10415.20	761.85	148.10

88.2	155	38.98	6196.75	953.25	992.23	6.03	0.94	957.98	1076.88	10481.13	766.67	149.04
88.2	156	39.85	6236.60	913.40	953.25	6.16	0.96	964.14	1083.81	10548.53	771.60	150.00
88.2	157	40.12	6276.72	873.28	913.40	6.20	0.96	970.34	1090.78	10616.39	776.57	150.96
88.2	158	40.15	6316.87	833.13	873.28	6.21	0.97	976.55	1097.75	10684.30	781.54	151.93
88.2	159	40.72	6357.59	792.41	833.13	6.30	0.98	982.84	1104.83	10753.17	786.57	152.91
88.2	160	40.84	6398.43	751.57	792.41	6.31	0.98	989.15	1111.93	10822.25	791.63	153.89
88.2	161	40.62	6439.05	710.95	751.57	6.28	0.98	995.43	1118.99	10890.95	796.65	154.87
88.2	162	38.64	6477.69	672.31	710.95	5.97	0.93	1001.41	1125.70	10956.31	801.43	155.80
88.2	163	39.05	6516.74	633.26	672.31	6.04	0.94	1007.44	1132.49	11022.36	806.26	156.74
88.2	164	39.37	6556.11	593.89	633.26	6.09	0.95	1013.53	1139.33	11088.95	811.13	157.68
88.2	165	40.08	6596.19	553.81	593.89	6.20	0.96	1019.73	1146.30	11156.74	816.09	158.65
88.2	166	40.46	6636.65	513.35	553.81	6.25	0.97	1025.98	1153.33	11225.17	821.10	159.62
88.2	167	39.18	6675.83	474.17	513.35	6.06	0.94	1032.04	1160.14	11291.44	825.95	160.56
88.2	168	40.93	6716.76	433.24	474.17	6.33	0.98	1038.37	1167.25	11360.67	831.01	161.55
88.2	169	37.69	6754.45	395.55	433.24	5.83	0.91	1044.19	1173.80	11424.42	835.67	162.45
88.2	170	40.63	6795.08	354.92	395.55	6.28	0.98	1050.47	1180.86	11493.14	840.70	163.43
88.2	171	40.61	6835.69	314.31	354.92	6.28	0.98	1056.75	1187.92	11561.83	845.72	164.41
88.2	172	39.7	6875.39	274.61	314.31	6.14	0.95	1062.89	1194.82	11628.98	850.64	165.36
88.2	173	40.58	6915.97	234.03	274.61	6.27	0.98	1069.16	1201.87	11697.61	855.66	166.34
88.2	174	40.23	6956.20	193.80	234.03	6.22	0.97	1075.38	1208.86	11765.66	860.63	167.31
88.2	175	40.82	6997.02	152.98	193.80	6.31	0.98	1081.69	1215.95	11834.70	865.68	168.29
88.2	176	39.4	7036.42	113.58	152.98	6.09	0.95	1087.78	1222.80	11901.34	870.56	169.23
88.2	177	38.93	7075.35	74.65	113.58	6.02	0.94	1093.80	1229.56	11967.19	875.38	170.17
88.2	178	40.29	7115.64	34.36	74.65	6.23	0.97	1100.03	1236.57	12035.33	880.36	171.14
88.2	179	39.59	7155.23	-5.23	34.36	6.12	0.95	1106.15	1243.45	12102.30	885.26	172.09

HALLIBURTON**Permian Basin****Lab Results – 1st Stage Primary****Job Information**

Request/Slurry	2665564/4	Rig Name	Citadel 3	Date	24/JAN/2021
Submitted By	Ryan Wilcoxson	Job Type	Intermediate Casing	Bulk Plant	
Customer	Ameredev Operating, LLC	Location	Lea	Well	Independence AGI 1

Well Information

Casing/Liner Size	13.625 in	Depth MD	7150 ft	BHST	134°F
Hole Size	17.5 in	Depth TVD	7150 ft	BHCT	100°F

Cement Information - Tail Design

<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Cement Properties</u>		
		NeoCem™ Cement	Slurry Density	13.2	lbm/gal
100	% BWOC	Cement Blend	Slurry Yield	1.43	ft3/sack
7.23	gal/sack	Fresh Water	Water Requirement	7.23	gal/sack
1	lb/sk	Bridgemaker II	Water Source	Fresh Water	

Pilot Test Results Request ID 2665564/4**UCA Comp. Strength**

End Temp (degF)	Pressure (psi)	50 psi (hh:mm)	100 psi (hh:mm)	500 psi (hh:mm)	1000 psi(hh:mm)	8hr CS (psi)	12 hr CS (psi)	16 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)	End CS (psi)	End Time (hrs)
130	3000	5:55	6:36	17:17	34:41	181	353	439	709	1203	1236	50

Pilot Test Results Request ID 2665564/1**API Rheology**

Temp (degF)	300	200	100	60	30	6	3	Cond Time (min)	Cond Temp (degF)
98	63	53	38	32	25	18	17	30	98

API Rheology

Temp (degF)	300	200	100	60	30	6	3
80	40	31	20	15	11	6	5

API Fluid Loss

Test Temp (degF)	Test Pressure (psi)	Test Time (min)	Meas. Vol.	Calculated FL (<30 min)	Conditioning time (min)	Conditioning Temp (degF)
98	1000	11.66	67	214.85	30	98

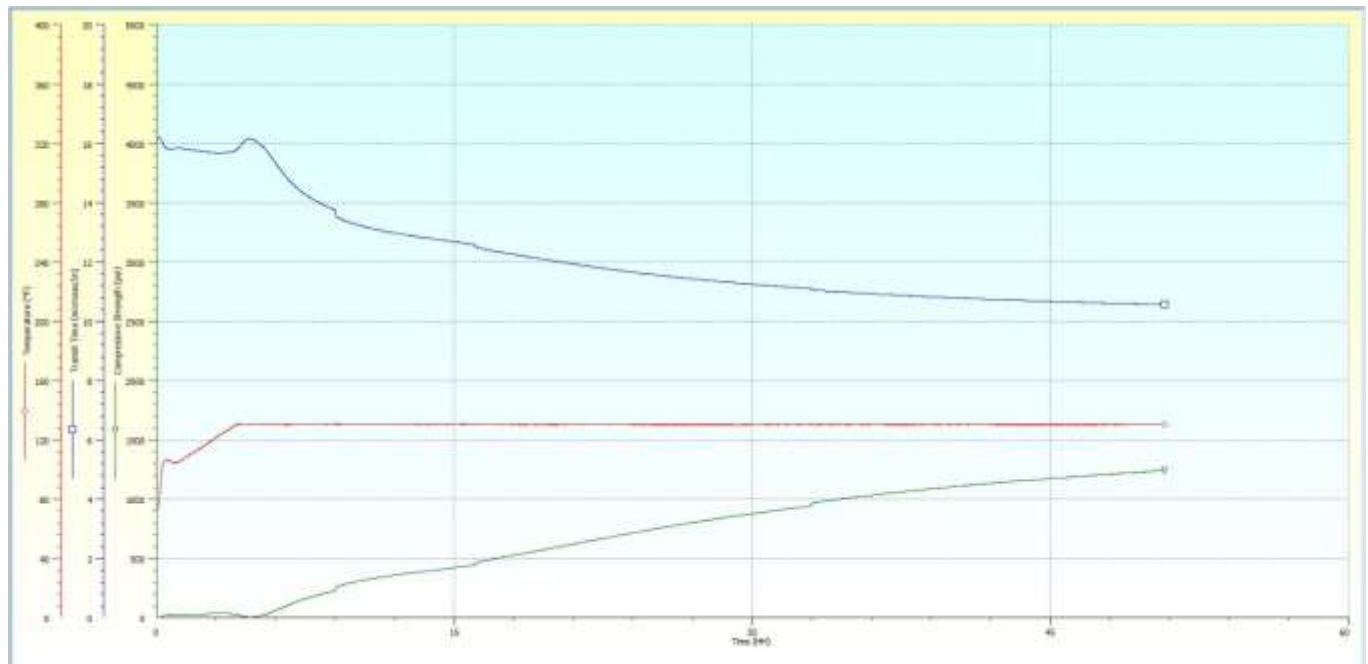
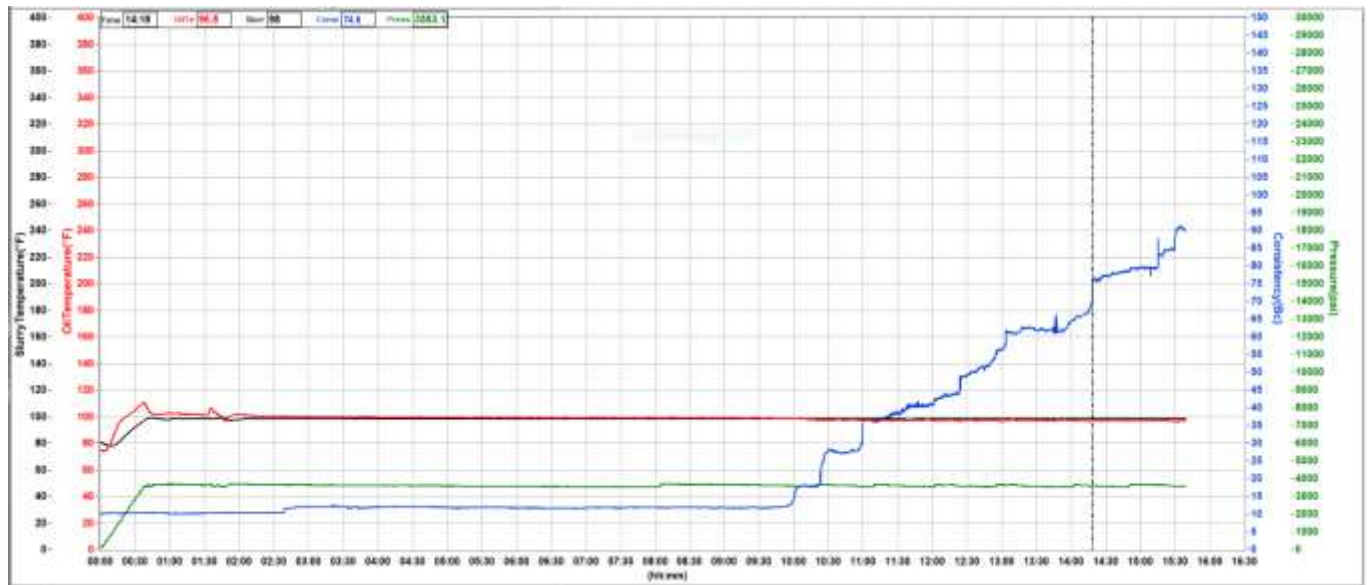
Free Fluid API 10B-2

Con. Temp (degF)	Heat Time (min)	Cond. Time (min)	Static T. (F)	Static time (min)	Incl. (deg)	% Fluid
98	37	30	70	120	0	0

Pilot Test Results Request ID 2665564/3**Thickening Time - ON-OFF-ON**

Test Temp (degF)	Pressure (psi)	Reached in (min)	30 Bc (hh:min)	50 Bc (hh:min)	70 Bc (hh:min)	Start Bc	Stirring before stop (mins)	Static Period (min)	Termination time (hh:min)	Termination Bc
98	3600	37	11:00	12:37	14:18	10.1	92	15	15:38	90

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HALLIBURTON**Permian Basin****Lab Results – 2nd Stage Lead****Job Information**

Request/Slurry	2666360/1	Rig Name	Citadel 3	Date	24/JAN/2021
Submitted By	Ryan Wilcoxson	Job Type	Stage collar - fullbore (ES/ESIPC)	Bulk Plant	
Customer	Ameredev Operating, LLC	Location	Lea	Well	Independence AGI 1

Well Information

Casing/Liner Size	13.625 in	Depth MD	4932 ft	BHST	117°F
Hole Size	17.5 in	Depth TVD	4932 ft	BHCT	94°F

Cement Information - Lead Design

Conc	UOM	Cement/Additive	Cement Properties		
		NeoCem™ Cement	Slurry Density	11.5	lbm/gal
100	% BWOC	Cement Blend	Slurry Yield	2.24	ft ³ /sack
13.28	gal/sack	Fresh Water	Water Requirement	13.28	gal/sack
			Water Source	Fresh Water	

Pilot Test Results Request ID 2666360/1**API Fluid Loss**

Test Temp (degF)	Test Pressure (psi)	Test Time (min)	Meas. Vol.	Calculated FL (<30 min)	Conditioning time (min)	Conditioning Temp (degF)
94	1000	12.5	96	296.95	30	94

API Rheology

Temp (degF)	300	200	100	60	30	6	3
80	16	13	8	7	5	3	3

API Rheology

Temp (degF)	300	200	100	60	30	6	3	Cond Time (min)	Cond Temp (degF)
94	30	23	16	12	9	6	6	30	94

Free Fluid API 10B-2

Con. Temp (degF)	Cond. Time (min)	Static time (min)	Incl. (deg)	% Fluid
94	30	120	0	0

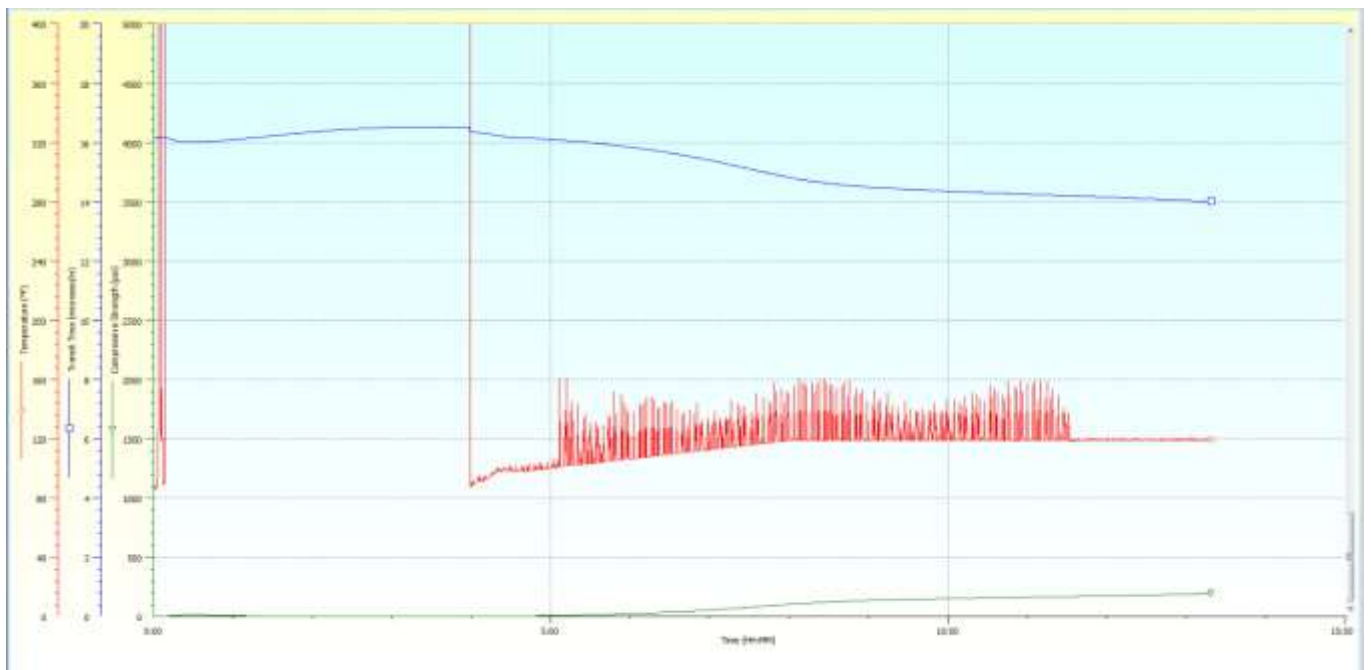
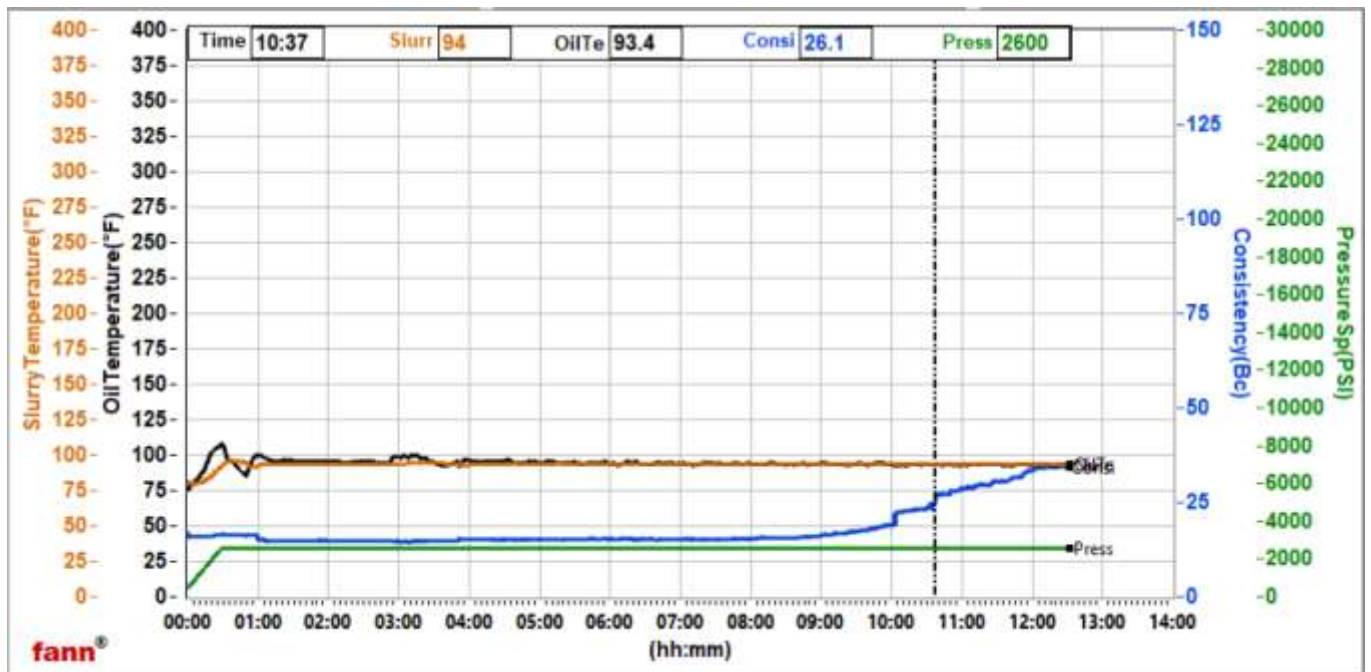
UCA Comp. Strength

End Temp (degF)	Pressure (psi)	50 psi (hh:mm)	100 psi (hh:mm)	500 psi (hh:mm)	8hr CS (psi)	12 hr CS (psi)	16 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)	End CS (psi)	End Time (hrs)
117	3000	7:02	8:02	27:01	98	168	261	433	590	599	50

Thickening Time - Thixotropic Cup

Temp (degF)	Reached in (min)	Pressure (psi)	Batch Mix (min)	Start Bc	26 Bc (hh:mm)	End Time (hh:mm)	End Bc
94	29	2600	0	17	10:37	12:30	34

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HALLIBURTON**Permian Basin****Lab Results – 2nd Stage Tail****Job Information**

Request/Slurry	2666193/2	Rig Name	Citadel 3	Date	24/JAN/2021
Submitted By	Ryan Wilcoxson	Job Type	Stage collar - fullbore (ES/ESIPC)	Bulk Plant	
Customer	Ameredev Operating, LLC	Location	Lea	Well	Independence AGI 1

Well Information

Casing/Liner Size	13.625 in	Depth MD	4932 ft	BHST	117°F
Hole Size	17.5 in	Depth TVD	4932 ft	BHCT	94°F

Cement Information - Tail Design

Conc	UOM	Cement/Additive	Cement Properties		
		VersaCem	Slurry Density	14.8	lbm/gal
100	% BWOC	Cement Blend	Slurry Yield	1.17	ft3/sack
5.16	gal/sack	Fresh Water	Water Requirement	5.16	gal/sack
0.3	% BWOC	HALAD-344 (PB)	Water Source	Fresh Water	
0.1	% BWOC	HR-601			

Pilot Test Results Request ID 2666193/2**Thickening Time - ON-OFF-ON**

Test Temp (degF)	Pressure (psi)	Reached in (min)	30 Bc (hh:mm)	50 Bc (hh:mm)	70 Bc (hh:mm)	Start Bc	Stirring before stop (mins)	Static Period (min)	Termination time (hh:mm)	Termination Bc
94	2600	26	5:24	5:39	6:20	9	35	15	7:59	95

UCA Comp. Strength

End Temp (degF)	Pressure (psi)	50 psi (hh:mm)	100 psi (hh:mm)	500 psi (hh:mm)	8hr CS (psi)	12 hr CS (psi)	16 hr CS (psi)	End CS (psi)	End Time (hrs)
117	3000	5:11	5:33	13:45	297	445	513	664	20

Pilot Test Results Request ID 2666193/1**API Fluid Loss**

Test Temp (degF)	Test Pressure (psi)	Test Time (min)	API FL (cc/30 min)	Meas. Vol.	Conditioning time (min)	Conditioning Temp (degF)
94	1000	30	58	29	30	94

API Rheology

Temp (degF)	300	200	100	60	30	6	3
80	55	39	22	14	8	3	1

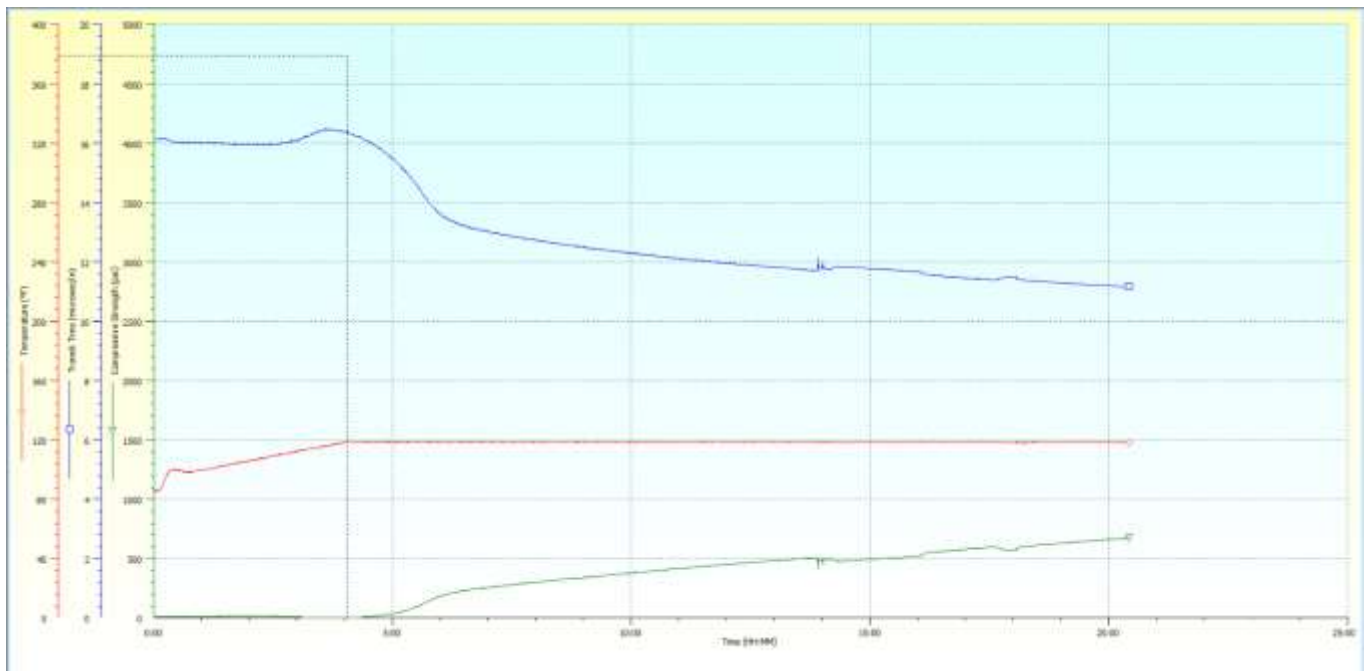
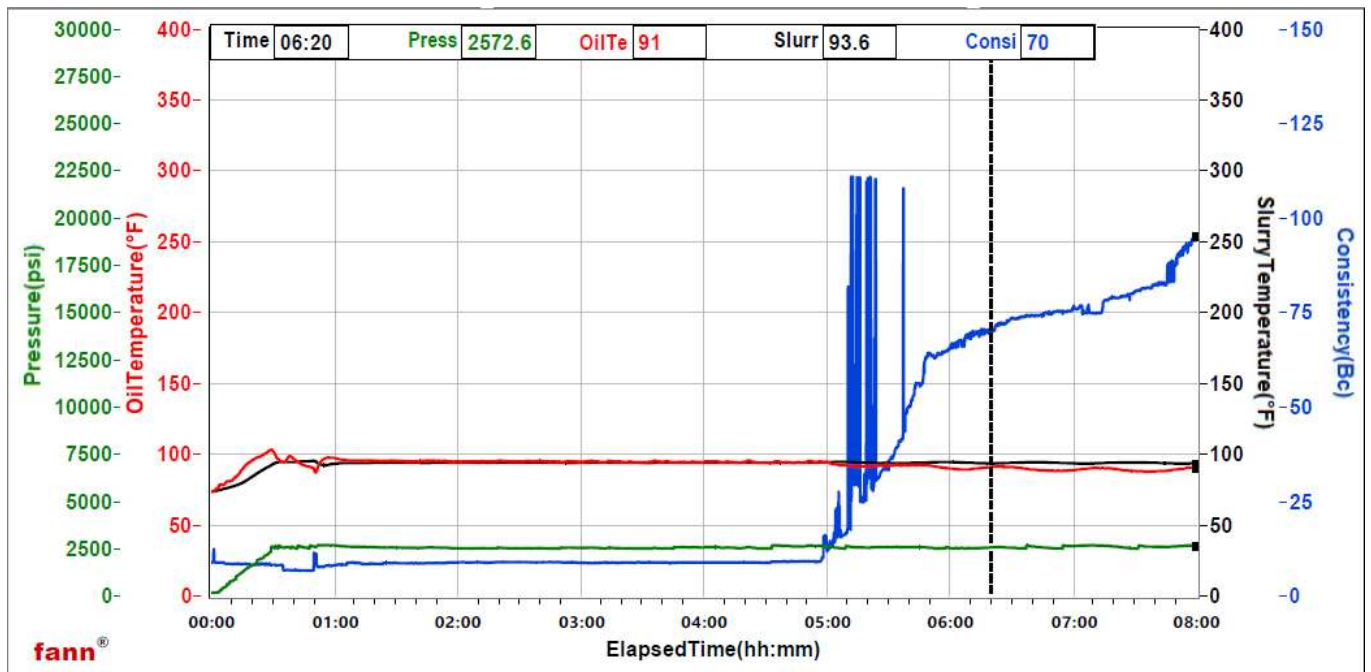
API Rheology

Temp (degF)	300	200	100	60	30	6	3	Cond Time (min)	Cond Temp (degF)
94	59	43	25	17	10	2	1	30	94

Free Fluid API 10B-2

Con. Temp (degF)	Cond. Time (min)	Static T. (F)	Static time (min)	Incl. (deg)	% Fluid
94	30	80	120	90	0

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HALLIBURTON**Permian Basin****Lab Results – 3rd Stage Lead****Job Information**

Request/Slurry	2665568/3	Rig Name	Citadel 3	Date	24/JAN/2021
Submitted By	Ryan Wilcoxson	Job Type	Intermediate Casing	Bulk Plant	
Customer	Ameredev Operating, LLC	Location	Lea	Well	Independence AGI 1

Well Information

Casing/Liner Size	13.375 in	Depth MD	3776 ft	BHST	106°F
Hole Size	17.5 in	Depth TVD	3776 ft	BHCT	90°F

Cement Information -EconoCem HLC Lead Design

<u>Conc</u>	<u>UOM</u>	<u>Cement/Additive</u>	<u>Cement Properties</u>		
		EconoCem	Slurry Density	12.9	lbm/gal
10.32	gal/sack	Fresh Water	Slurry Yield	1.9	ft3/sack
5	% BWOW	NaCl (Sodium Chloride) Salt	Water Requirement	10.32	gal/sack
0.7	% BWOC	HR-800	Water Source	Fresh Water	

Pilot Test Results Request ID 2665568/3**Thickening Time**

Temp (degF)	Pressure (psi)	Reached in (min)	Start BC	70 Bc (hh:mm)	Termination Time	Termination BC
90	2300	25	22	7:55	7:56	74.8

Pilot Test Results Request ID 2665568/1**API Rheology**

Temp (degF)	300	200	100	60	30	6	3
80	24	21	18	16	15	12	12

Free Fluid API 10B-2

Con. Temp (degF)	Cond. Time (min)	Static T. (F)	Static time (min)	Incl. (deg)	% Fluid
90	30	80	120	90	1

API Fluid Loss

Test Temp (degF)	Test Pressure (psi)	Test Time (min)	Meas. Vol.	Calculated FL (<30 min)	Conditioning time (min)	Conditioning Temp (degF)
90	1000	0.75	62	780.34	30	90

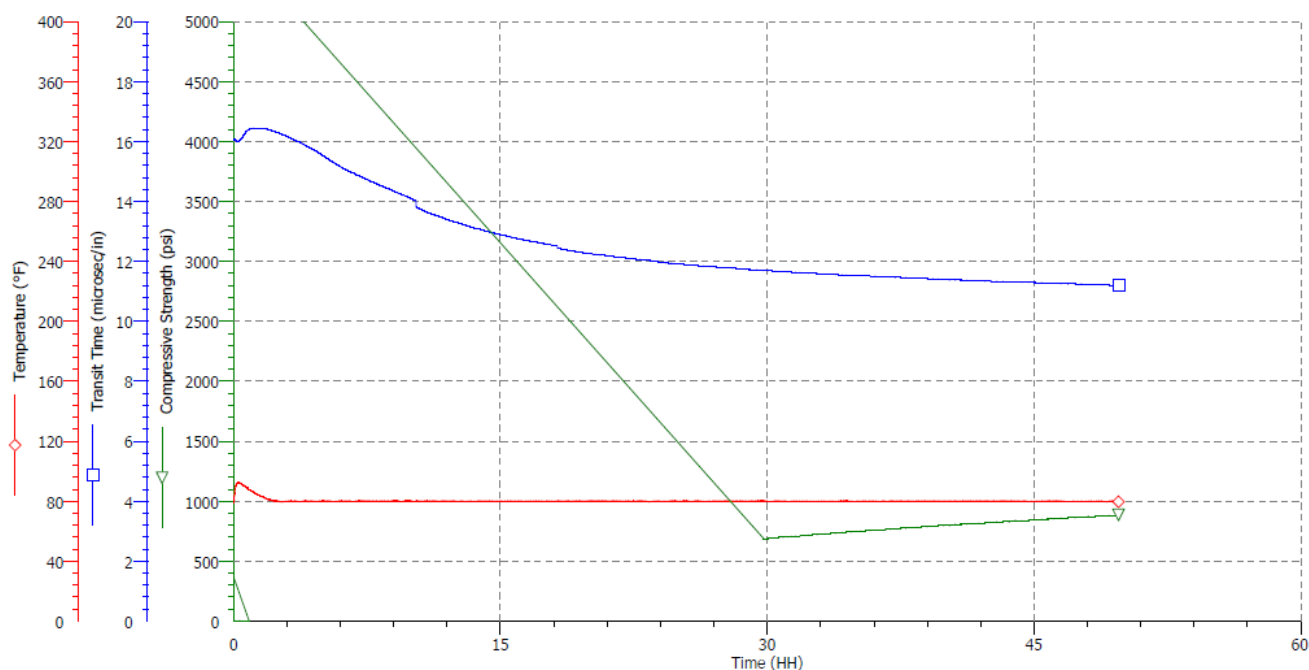
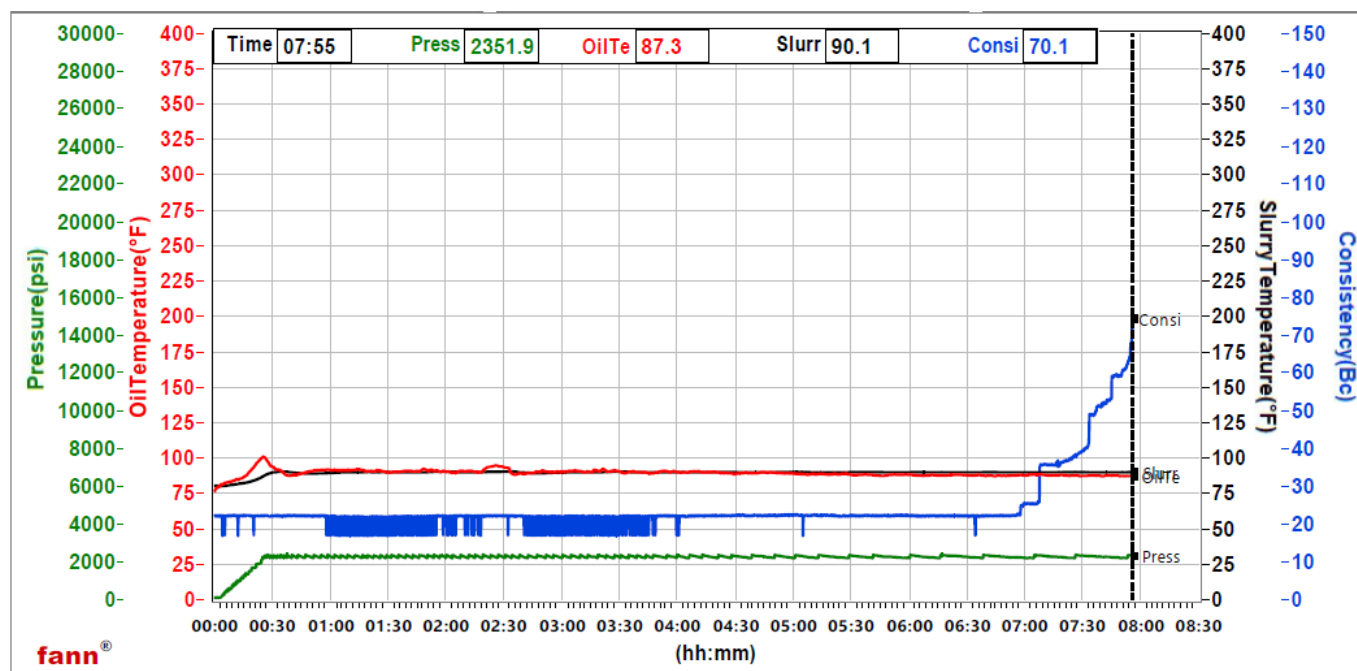
API Rheology

Temp (degF)	300	200	100	60	30	6	3	Cond Time (min)	Cond Temp (degF)
90	37	34	30	28	27	20	14	30	90

Pilot Test Results Request ID 2660151/1**UCA Comp. Strength**

End Temp (degF)	Pressure (psi)	50 psi (hh:mm)	500 psi (hh:mm)	12 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)
80	3000	5:33	19:32	269	595	867

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HALLIBURTON**Permian Basin****Lab Results – 3rd Stage Tail****Job Information**

Request/Slurry	2664429/1	Rig Name	Citadel 3	Date	24/JAN/2021
Submitted By	Ryan Wilcoxson	Job Type	Intermediate Casing	Bulk Plant	
Customer	Amerdev Operating, LLC	Location	Lea	Well	Independence AGI 1

Well Information

Casing/Liner Size	13.625 in	Depth MD	3776 ft	BHST	108°F
Hole Size	17.5 in	Depth TVD	3776 ft	BHCT	90°F

Cement Information - Tail Design

Conc	UOM	Cement/Additive	Cement Properties		
		HalCem	Slurry Density	14.8	lbm/gal
100	% BWOC	Cement Blend	Slurry Yield	1.33	ft3/sack
6.36	gal/sack	Fresh Water	Water Requirement	6.36	gal/sack
0.3	% BWOC	HALAD-9 (PB)	Water Source	Fresh Water	
0.2	% BWOC	HR-800			

Pilot Test Results Request ID 2664429/1**Thickening Time - ON-OFF-ON**

Test Temp (degF)	Pressure (psi)	Reached in (min)	70 Bc (hh:mm)	Start Bc	Stirring before stop (mins)	Static Period (min)	Termination time (hh:mm)	Termination Bc
89	2300	21	4:33	16	26	15	6:59	140

API Fluid Loss

Test Temp (degF)	Test Pressure (psi)	Test Time (min)	Meas. Vol.	Calculated FL (<30 min)	Conditioning time (min)	Conditioning Temp (degF)
89	1000	0.58	42	605.13	30	89

API Rheology

Temp (degF)	300	200	100	60	30	6	3
80	74	65	54	49	45	35	26

API Rheology

Temp (degF)	300	200	100	60	30	6	3	Cond Time (min)	Cond Temp (degF)
89	88	79	70	66	61	40	25	30	89

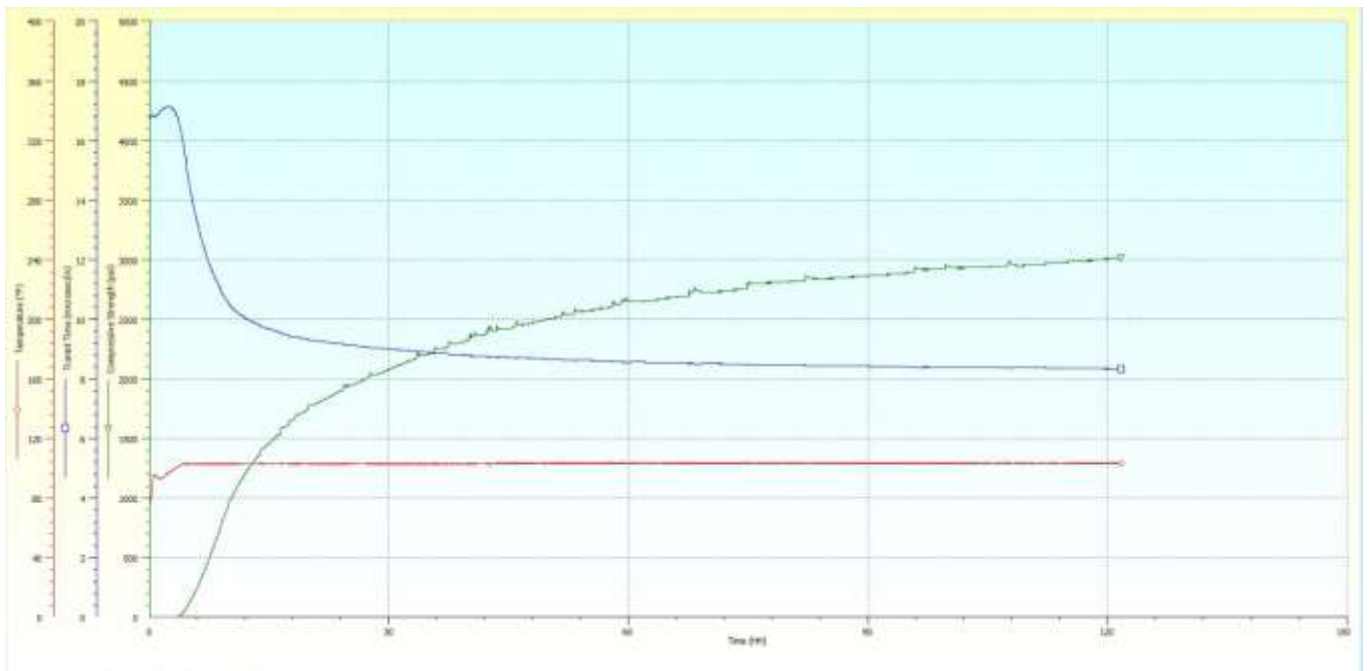
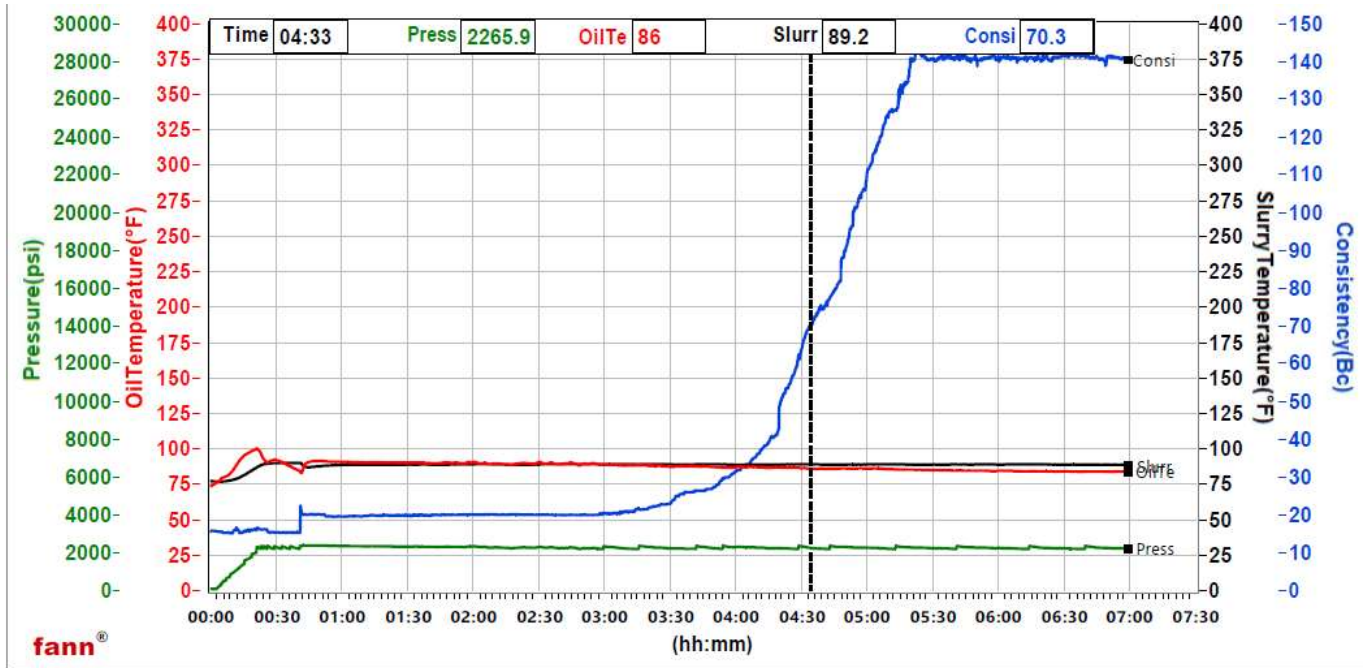
Free Fluid API 10B-2

Con. Temp (degF)	Cond. Time (min)	Static T. (F)	Static time (min)	Incl. (deg)	% Fluid
89	30	80	120	90	0

UCA Comp. Strength

End Temp (degF)	Pressure (psi)	50 psi (hh:mm)	100 psi (hh:mm)	500 psi (hh:mm)	1000 psi (hh:mm)	8hr CS (psi)	12 hr CS (psi)	16 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)	72 hr CS (psi)	End CS (psi)	End Time (hrs)
102	3000	4:21	4:45	7:28	10:12	594	1209	1519	1898	2459	2733	3005	121

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HALLIBURTON

iCem[®] Service

AMEREDEV OPERATING, LLC

US, NEW MEXICO

For: AMEREDEV OPERATING, LLC

Date: Tuesday, January 26, 2021

INDEPENDENCE AGI 1 MULTISTAGE INTERMEDIATE

LEA

Case 1

Job Date: Tuesday, January 26, 2021

AMEREDEV OPERATING

INDEPENDENCE AGI 1 SO# 906937497

Sincerely,

Ryan Wilcoxson

Legal Notice

Disclaimer:

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Customer: HALLIBURTON
Job: SO# 906937497 3 STAGE INTERMEDIATE
Case: Case 1

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HALLIBURTON

Customer: HALLIBURTON
 Job: SO# 906937497 3 STAGE INTERMEDIATE
 Case: Case 1

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Dwnhole Density (ppg)	Rcrc Density (ppg)	Cmb Pump Rate (bbl/min)	Pump A Pressure (psi)	Pump B Pressure (psi)	Comments
Event	1	Call Out	Call Out	1/25/2021	04:30:00	USER						AMEREDEV OPERATING INDEPENDENCE AGI #1 SO# 906937497 CALLED OUT AT 0430 HRS TO BE ON LOCATION AT 1100 HRS
Event	2	Crew Leave Yard	Crew Leave Yard	1/25/2021	07:00:00	USER						SAFETY MEETING WITH CREW
Event	3	Arrive At Loc	Arrive At Loc	1/25/2021	09:30:00	USER						WHEN HALLIBURTON SHOWED UP RIG WAS RUNNING PIPE. CHECK CMT WATER AND ALL MATS
Event	4	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	1/25/2021	10:00:00	USER						SAFETY HUDDLE WITH CREW
Event	5	Safety Meeting - Pre Job	Safety Meeting - Pre Job	1/26/2021	03:55:00	USER	8.48	0.06	0.00	2.37	-19.55	SAFETY MEETING WITH DSM AND RIG CREW TO DISCUSS JOB
Event	6	Standby - Other - see comments	Standby - Other - see comments	1/26/2021	04:15:00	USER	8.48	0.06	0.00	3.25	-18.52	WHILE TRYING TO STAB HEAD NOTICED THAT COUPLER WOULD NOT FIT PIPE. ORDERED ANOTHER HEAD FROM IRON HANDS AND HAD DELIVERED TO LOCATION. HEAD ARRIVED AT 0845 HRS
Event	7	Other	Other	1/26/2021	08:36:58	NONE	8.53	0.00	0.00	-0.14	-7.65	PRIME PUMPS
Event	8	Start Job	Start Job	1/26/2021	08:52:00	USER	8.53	0.00	0.00	-1.38	-7.45	
Event	9	Test Lines	Test Lines	1/26/2021	08:55:19	NONE	8.56	0.00	0.00	13.71	11.86	TESTED LNES TO 5000 PSI LINES HELD

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(v. 5.1.101.0)

Created: Tuesday, January 26, 2021

HALLIBURTON

Customer: HALLIBURTON
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Event	10	Pump Spacer 1	Pump Spacer 1	1/26/2021	08:58:46	NONE	8.40	8.25	3.94	74.55	67.54	PUMPED 40 BBLS MUD FLUSH WITH BE9 AND ANHIB RED DYE AT 4 BPM PSI AT 80
Event	11	Pump Lead Cement	Pump Lead Cement	1/26/2021	09:06:36	NONE	8.25	13.42				PUMPED 257 BBLS 991 SKS VERSACEM MIXED AT 13.2 AT 8 BPM PSI AT 543. ADDITIVES 1# BRIDGE MAKER .40 HR 601 .20 HALAD 344 TOP OF CMT 5350FT
Event	12	Drop Top Plug	Drop Top Plug	1/26/2021	09:44:36	NONE	13.73	14.34	6.16	368.30	368.34	
Event	13	Pump Displacement	Pump Displacement	1/26/2021	09:50:49	NONE	14.22	8.50	0.00	14.40	1.85	PUMPED 270 BBLS FRESH WATER AND 781 MUD FOR TOTAL OF 1051 BBLS AT 8 BPM PSI AT 275
Event	14	Bump Plug	Bump Plug	1/26/2021	12:09:36	NONE	8.92	0.12	0.00	959.56	951.38	WHEN PLUG WAS ABOUT TO BUMP PSI WAS AT 740 ENDING AT 960 PSI
Event	15	Set Packer	Set Packer	1/26/2021	12:24:56	NONE	8.97	0.12	0.00	1553.29	1547.32	PACKER INFLATED AT 1580 TAKING 1 BBL FLUID
Event	16	Other	Other	1/26/2021	12:30:23	NONE	8.89	0.12	0.00	995.16	985.28	FLOATS HELD GOT BACK 4 BBLS TO PUMP
Event	17	Drop Ball	Drop Ball	1/26/2021	12:32:34	NONE	8.85	0.12	0.00	12.77	-12.99	35 MIN WAIT FOR BOMB TO DROP
Event	18	Open Multiple Stage Cementer	Open Multiple Stage Cementer	1/26/2021	13:11:47	NONE	8.78	0.12	0.00	6.90	-10.11	TOOL OPENED AT 630 PSI TOOK 1 BBL
Event	19	Circulate Well	Circulate Well	1/26/2021	13:19:14	NONE	8.76	0.12	1.81	211.45	202.29	PUMPED 20 BBLS AT 6 BPM PSI WAS AT 420
Event	20	Pump Spacer 1	Pump Spacer 1	1/26/2021	13:28:48	NONE	8.28	8.42	4.13	205.22	196.23	PUMPED 40 BBLS MUD FLUSH WITH BE9 ANHIB AND RED DYE AT 4 BPM PSI AT 220

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Created: Tuesday, January 26, 2021

HALLIBURTON

Customer: HALLIBURTON
 Job: SO# 906937497 3 STAGE INTERMEDIATE
 Case: Case 1

Event	21	Pump Lead Cement	Pump Lead Cement	1/26/2021	13:36:47	NONE	11.51	11.32	7.02	420.77	416.78	PUMPED 173 BBLS 434 SKS NEOCHEM MIXED AT 11.5 AT 8 BPM PSI AT 330 TOP OF LEAD CMT 3818 FT
Event	22	Pump Tail Cement	Pump Tail Cement	1/26/2021	14:00:24	NONE	13.34	14.82	4.82	235.42	219.65	PUMPED 100 SKS VERSACHEM MIXED AT 14.8 AT 5 BPM PSI AT 250 ADDITIVES .10 HR 601 .30 HALAD 344 TOP OF TAIL CMT 5171 FT
Event	23	Drop Top Plug	Drop Top Plug	1/26/2021	14:04:56	NONE	15.09	14.96	3.80	267.06	255.96	
Event	24	Pump Displacement	Pump Displacement	1/26/2021	14:09:09	NONE	15.15	8.46	0.00	26.68	-2.67	PUMPED 230 BBLS FRESH WATER 566 BBLS MUD TOTAL OF 796 BBLS AT 8 BPM PSI AT 290
Event	25	Comment	Comment	1/26/2021	15:00:00	USER	9.28	8.51	7.93	280.90	286.03	CIRCULATED 35 BBLS 135 SKS CMT OFF TOOL
Event	26	Bump Plug	Bump Plug	1/26/2021	15:53:50	NONE	8.53	8.52	0.00	2041.69	2033.26	WHEN PLUG WAS ABOUT TO BUMP PSI WAS AT 800 ENDING AT 2021
Event	27	Set Packer	Set Packer	1/26/2021	16:04:48	NONE	8.57	8.52	0.00	2693.49	2687.32	PACKER INFLATED AT 2750 PSI TOOK 1/2 BBL
Event	28	Drop Ball	Drop Ball	1/26/2021	16:10:53	NONE	8.94	8.52	0.00	30.07	-15.09	20 MIN WAIT
Event	29	Open Multiple Stage Cementer	Open Multiple Stage Cementer	1/26/2021	16:47:57	NONE	8.84	8.52	0.00	16.52	-17.20	TOOL OPENED AT 252 PSI AT 2 BPM
Event	30	Circulate Well	Circulate Well	1/26/2021	16:49:20	NONE	8.68	8.52	1.49	75.39	40.04	PUMPED 20 BBLS FRESH WATER AT 4 BPM PSI AT 82
Event	31	Pump Spacer 1	Pump Spacer 1	1/26/2021	16:54:32	NONE	8.34	8.52	4.15	81.35	55.51	PUMPED 40 BBLS MUD FLUSH WITH BE9 ANHIB AND RED DYE AT 4 BPM PSI AT 91
Event	32	Pump Lead Cement	Pump Lead Cement	1/26/2021	17:04:27	NONE	8.73	12.92	4.14	84.22	54.26	PUMPED 675 .4 BBLS 1995 SKS AT 12.9 PPG AT 7 BPM PSI AT 420. ADDITIVES 5%

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Created: Tuesday, January 26, 2021

HALLIBURTON

Customer: HALLIBURTON
 Job: SO# 906937497 3 STAGE INTERMEDIATE
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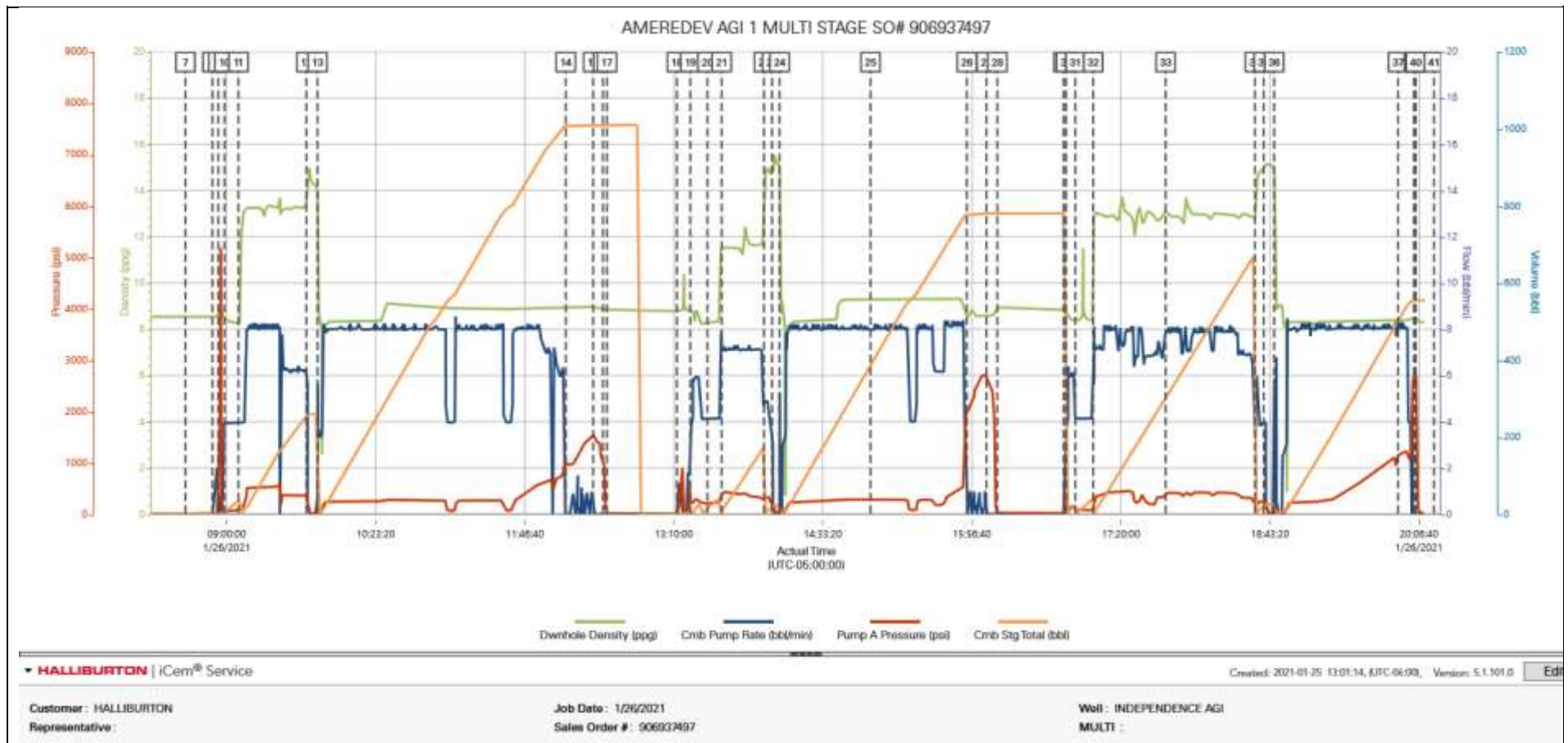
SALT .70 HR 800 TOP OF LEAD CMT SURFACE												
Event	33	Comment	Comment	1/26/2021	17:45:00	USER	13.14	13.02	7.94	422.53	414.85	CIRCULATED 53 BBLS 132 SKS OFF TOOL FOR 2ND STAGE
Event	34	Pump Tail Cement	Pump Tail Cement	1/26/2021	18:34:53	NONE	12.76	13.69	4.88	171.05	152.57	PUMPED 100 SKS HALCEM MIXED AT 14.8 AT 5 BPM PSI AT 280 ADDITIVES .20 HR 800 .30 HALAD 9 TOP OF TAIL CMT 3618 FT
Event	35	Drop Top Plug	Drop Top Plug	1/26/2021	18:39:48	NONE	15.03	14.33	3.93	220.63	207.31	
Event	36	Pump Displacement	Pump Displacement	1/26/2021	18:45:39	NONE	15.09	8.44	0.00	21.78	-9.19	
Event	37	Comment	Comment	1/26/2021	19:55:00	USER	8.40	8.45	7.98	1156.27	1146.34	CIRCULATED 70 BBLS 207 SKS TO SURFACE
Event	38	Bump Plug	Bump Plug	1/26/2021	20:03:51	NONE	8.50	8.45	0.00	2709.00	2699.44	
Event	39	Close Multiple Stage Cementer	Close Multiple Stage Cementer	1/26/2021	20:04:45	NONE	8.50	8.45				
Event	40	Other	Other	1/26/2021	20:04:50	NONE	8.50	8.45	0.00	2714.36	2703.94	FLOATS HELD GOT BACK 6.5 BBLS TO PUMP
Event	41	End Job	End Job	1/26/2021	20:15:00	NONE						THANK YOU STEVEN AND CREW
Event	42	Crew Leave Location	Crew Leave Location	1/27/2021	10:00:00	USER						CREW LEAVE LOCATION FOR NEXT JOB
Event	43	Rig Down Lines	Rig Down Lines	1/27/2021	20:30:00	USER						HELD SAFETY MEETING WITH CREW AND RIG DOWN LINES

HALLIBURTON

Customer: HALLIBURTON
 Job: SO# 906937497 3 STAGE INTERMEDIATE
 Case: Case 1

2.0 Attachments

2.1 Case 1-Custom Results.png



HALLIBURTON

Customer: HALLIBURTON

Job: SO# 906937497 3 STAGE INTERMEDIATE

Case: Case 1

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Mud Flush III	Mud Flush III	40	bbl	8.4				
	0.20 gal/bbl	ANHIB II (100003821)							
	0.05 gal/bbl	BE-9, 5 GAL PAIL (101718548)							
	4 lbm/bbl	MUD FLUSH III, 40 LB SACK (101633304)							

last updated on 1/26/2021 8:48:50 PM

Page 1 of 4

HALLIBURTON***Cementing Job Summary***

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	NeoCem™ T	VERSACEM (TM) SYSTEM	991	sack	13.2	1.456		5	7.43
	0.40 %	HR-601, 50 LB BAG (101328348)							
	0.20 %	HALAD(R)-344, 50 LB (100003670)							
	1 lbm	BRIDGEMAKER II LCM, 50 LB SACK - (1062609)							
	7.43 Gal	FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Displacement Fluid	MUD	1051	bbl	8.4				
Cement Left In Pipe Amount 40 ft Reason Shoe Joint									

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Created: Tuesday, January 26, 2021

HALLIBURTON

Customer: HALLIBURTON
 Job: SO# 906937497 3 STAGE INTERMEDIATE
 Case: Case 1

Fluid Data									
Stage/Plug #: 2									
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Mud Flush III	Mud Flush III	40	bbl	8.4				
	4 lbm/bbl	MUD FLUSH III, 40 LB SACK (101633304)							
	0.20 gal/bbl	ANHIB II (100003821)							
	0.05 gal/bbl	BE-9, 5 GAL PAIL (101718548)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	NeoCem™ IL2	NeoCem TM	433	sack	11.5	2.277		5	13.63
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	VersaCem™ H	VERSACEM (TM) SYSTEM	100	sack	14.8	1.184		5	5.41
	0.10 %	HR-601, 50 LB BAG (101328348)							
	0.30 %	HALAD(R)-344, 50 LB (100003670)							
	5.41 Gal	FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Displacement Fluid	MUD	796	bbl	8.4				
Cement Left In Pipe Amount 85 ft Reason Shoe Joint									

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(v. 5.1.101.0)

Created: Tuesday, January 26, 2021

HALLIBURTON

Customer: HALLIBURTON
 Job: SO# 906937497 3 STAGE INTERMEDIATE
 Case: Case 1

Fluid Data										
Stage/Plug #: 3										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Mud Flush III	Mud Flush III	40	bbl	8.4					
4 lbm/bbl		MUD FLUSH III, 40 LB SACK (101633304)								
0.20 gal/bbl		ANHIB II (100003821)								
0.05 gal/bbl		BE-9, 5 GAL PAIL (101718548)								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	EconoCem™ C	ECONOCHEM (TM) SYSTEM	1995	sack	12.9	1.901		5	10.36	
5 %		SALT, BULK (100003695)								
0.70 %		HR-800, 50 LB SACK (101619742)								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	HalCem - C	HALCEM (TM) SYSTEM	100	sack	14.8	1.335		5	6.4	
0.30 %		HALAD(R)-9, 50 LB (100001617)								
0.20 %		HR-800, 50 LB SACK (101619742)								
94 lbm		CMT - PREMIUM PLUS - CLASS C REG OR TYPE III, BULK (100012205)								
6.40 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
4	Displacement Fluid	MUD	568	bbl	8.4					
Cement Left In Pipe		Amount	85 ft		Reason			Shoe Joint		
Mix Water: pH ##		Mix Water Chloride: 500 ppm		Mix Water Temperature: ## °F °C						
Cement Temperature: ## °F °C		Plug Displaced by: ## lb/gal kg/m ³ XXXX		Disp. Temperature: ## °F °C						
Plug Bumped? Yes		Bump Pressure: 1150psi MPa		Floats Held? Yes						
Cement Returns: 70 bbl m ³		Returns Density: ## lb/gal kg/m ³		Returns Temperature: ## °F °C						

iCem® Service
 (v. 5.1.101.0)
 Tuesday, January 26, 2021



PO Box 7
Lovington, NM 88260
(575) 942-9472

Company Amerador Date 01-28-21
Lease Independence AGI 1 County Lea
Drilling Contractor Citadel 3 Plug & Drill Pipe Size 13 - 4 1/2 in

Accumulator Function Test - OO&GO#2

To Check - USABLE FLUID IN THE NITROGEN BOTTLES (III.A.2.c.i. or ii or iii)

- Make sure all rams and annular are open, and if applicable, HCR is closed.
- Ensure accumulator is pumped up to working pressure! **(Shut off all pumps)**
 1. Open HCR Valve. (If applicable)
 2. Close annular.
 3. Close **all** pipe rams.
 4. Open one set of the pipe rams to simulate closing the blind ram.
 5. For 3 ram stacks, open the annular to achieve the 50+ % safety factor. (5M and greater systems).
 6. **Record remaining pressure** 1400 **psi. Test Fails if pressure is lower than required.**
 - a. {950 psi for a 1500 psi system} b. {1200 psi for a 2000 & 3000 psi system}
 7. If annular is closed, open it at this time and close HCR.

To Check - PRECHARGE ON BOTTLES OR SPHERICAL (III.A.2.d.)

- Start with manifold pressure at, or above, maximum acceptable pre-charge pressure:
 - a. {800 psi for a 1500 psi system} b. {1100 psi for 2000 and 3000 psi system}
- 1. Open bleed line to the tank, slowly. **(Gauge needle will drop at the lowest bottle pressure)**
- 2. Close bleed line. Barely bump electric pump and see what pressure the needle jumps up to.
- 3. **Record pressure drop** 1100 **psi. Test fails if pressure drops below minimum.**
- **Minimum:** a. {700 psi for a 1500 psi system} b. {900 psi for a 2000 & 3000 psi system}

To Check - THE CAPACITY OF THE ACCUMULATOR PUMPS (III.A.2.f.)

- Isolate the accumulator bottles or spherical from the pumps & manifold.
- Open the bleed off valve to the tank, {manifold psi should go to 0 psi}, close bleed valve.
 1. Open the HCR valve, {if applicable}
 2. Close annular.
 3. With **pumps** only, time how long it takes to regain the required manifold pressure.
 4. **Record elapsed time** 7.72 **. Test fails if it takes over 2 minutes.**
 - a. {950 psi for a 1500 psi system} b. {1200 psi for a 2000 & 3000 psi system}

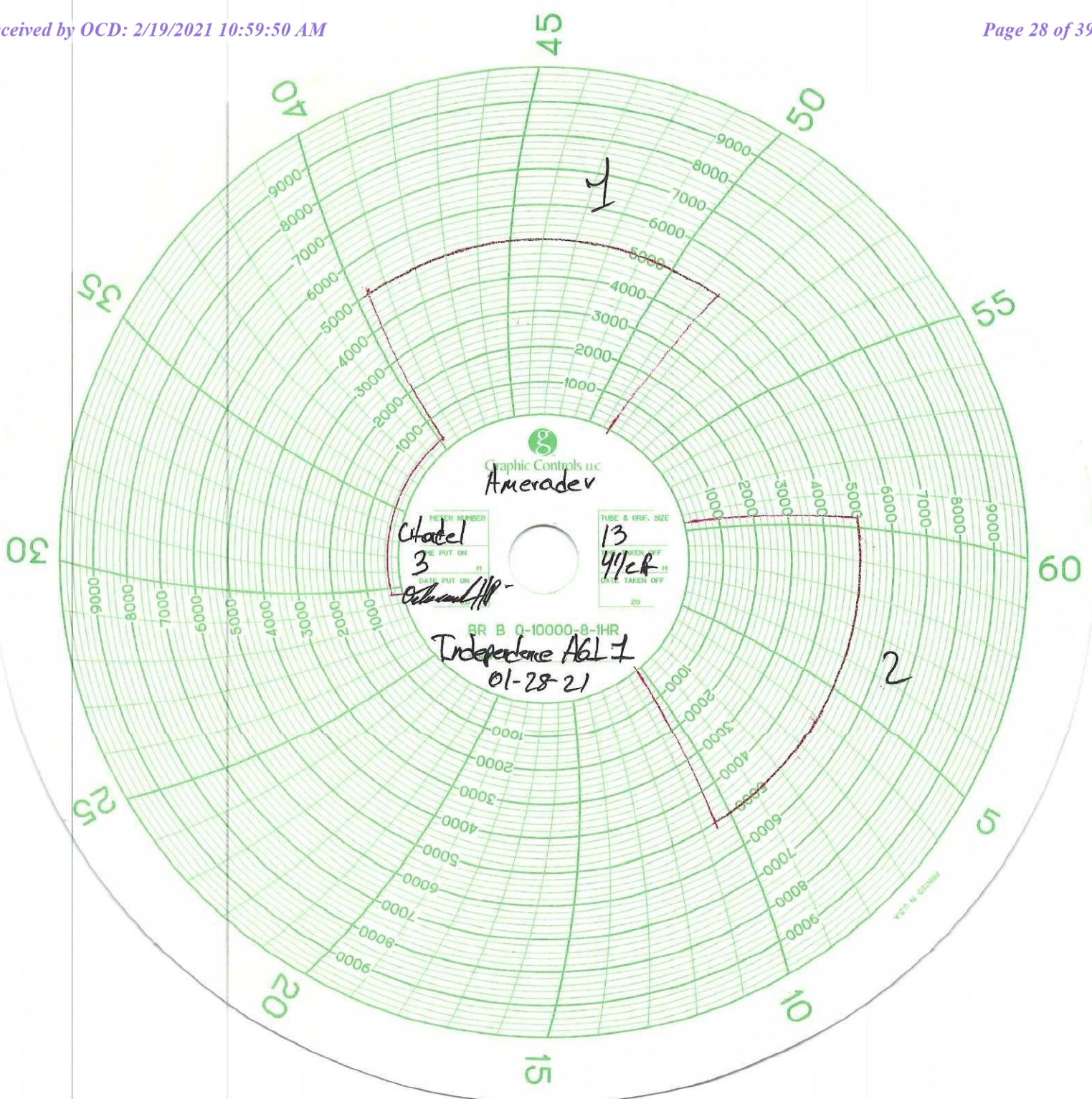


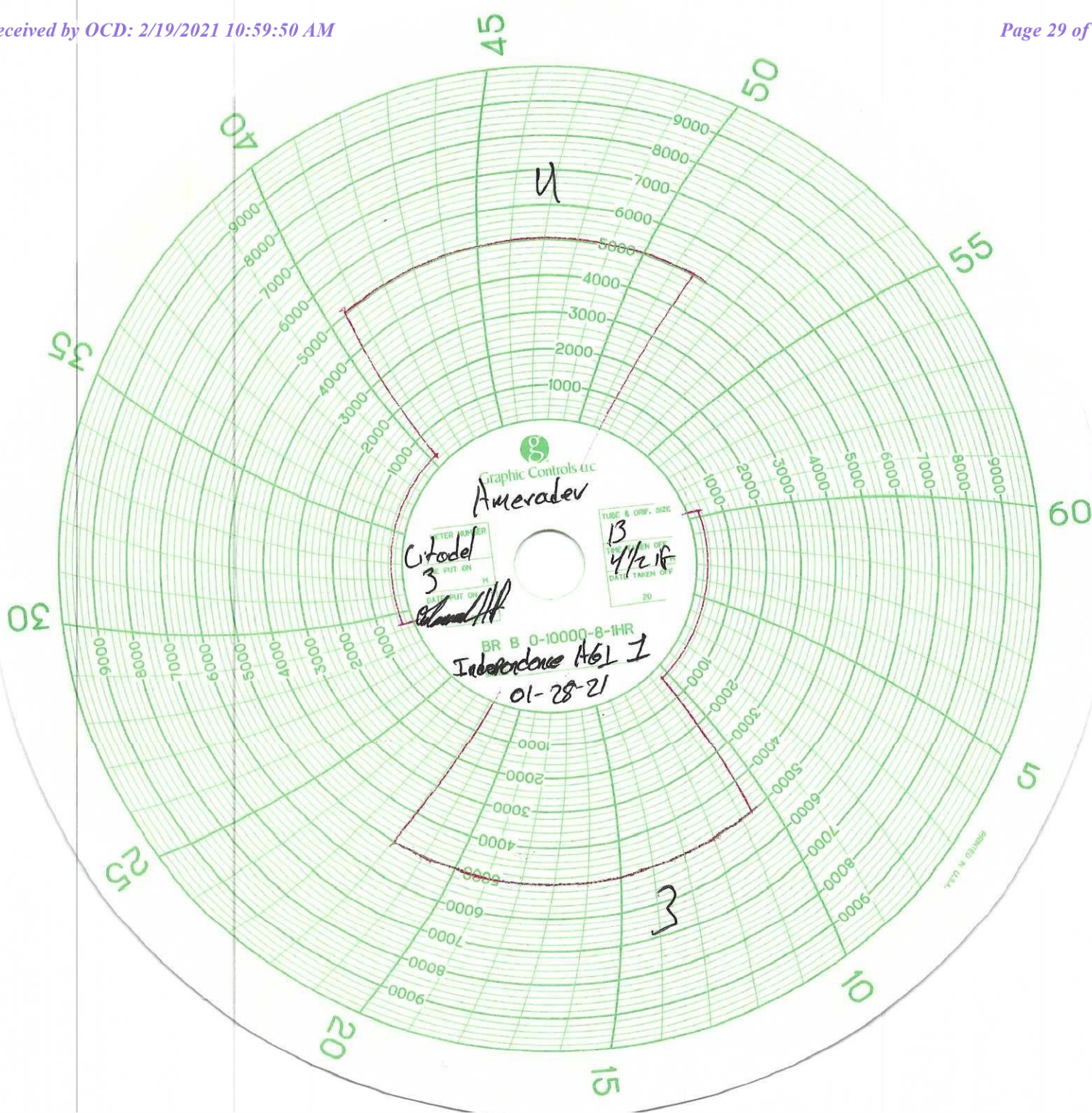
TESTING DETAILS

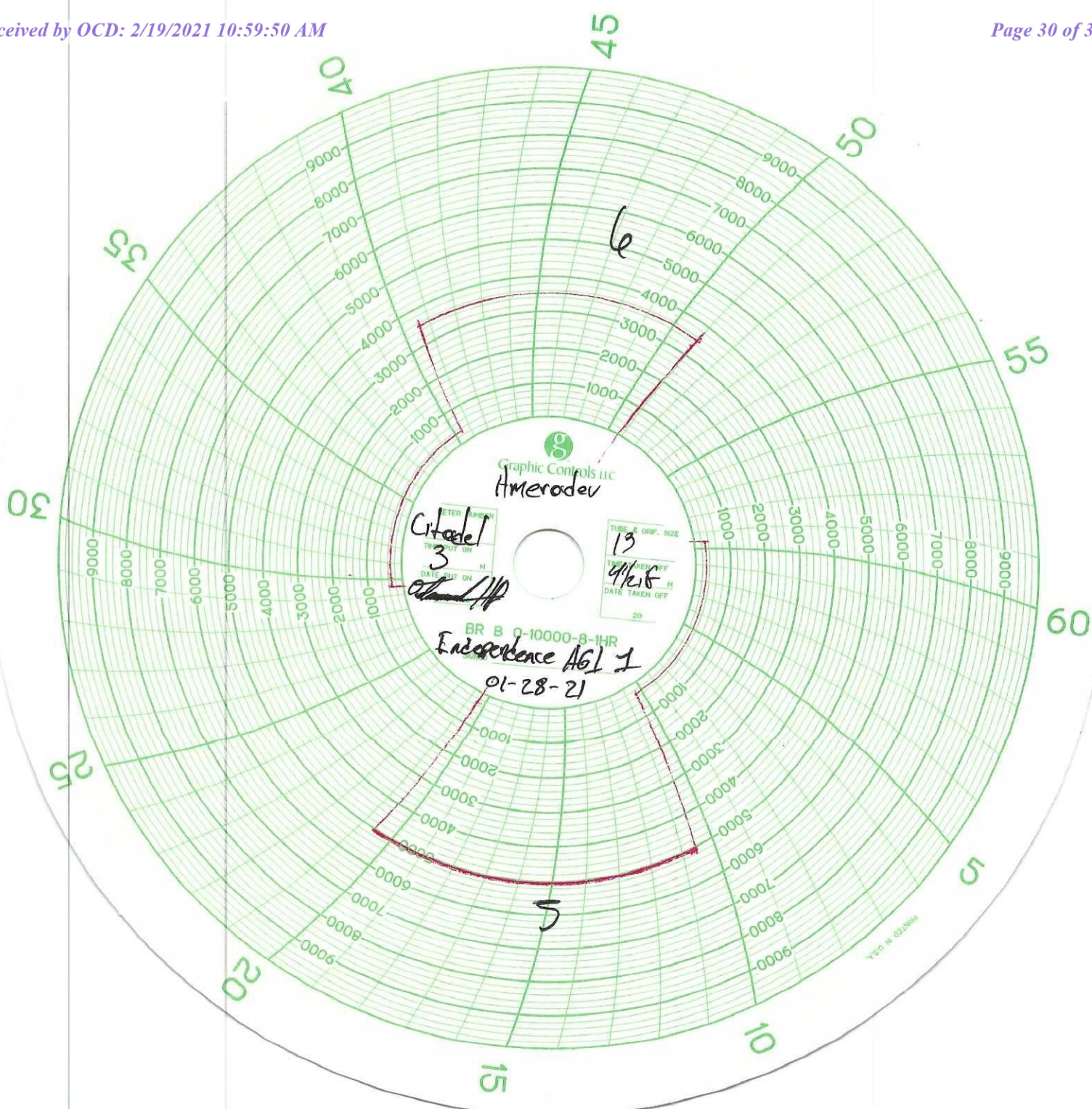
Test Plug 13 Drill Pipe Size 4 1/2 in Crossovers N-A

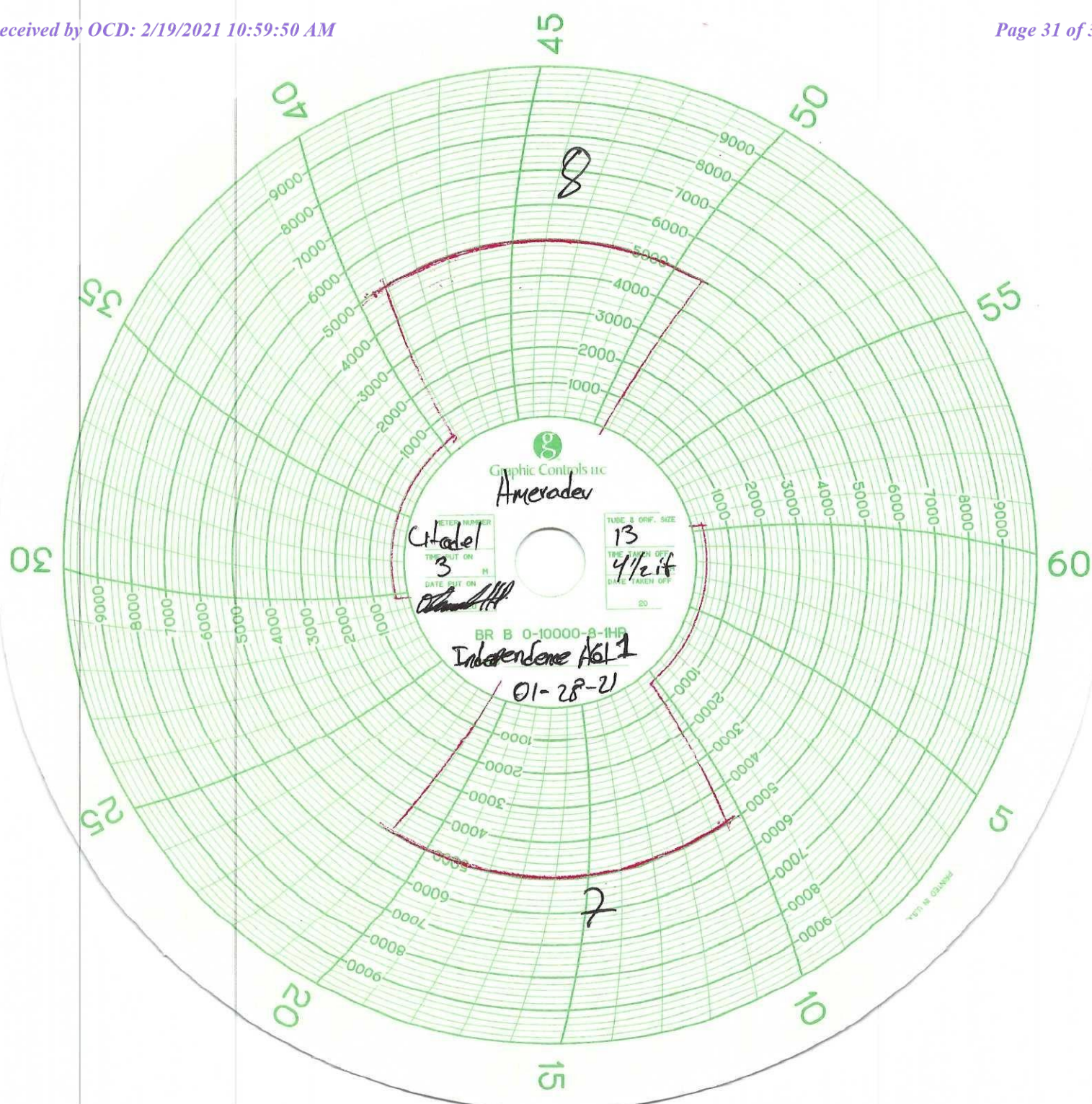
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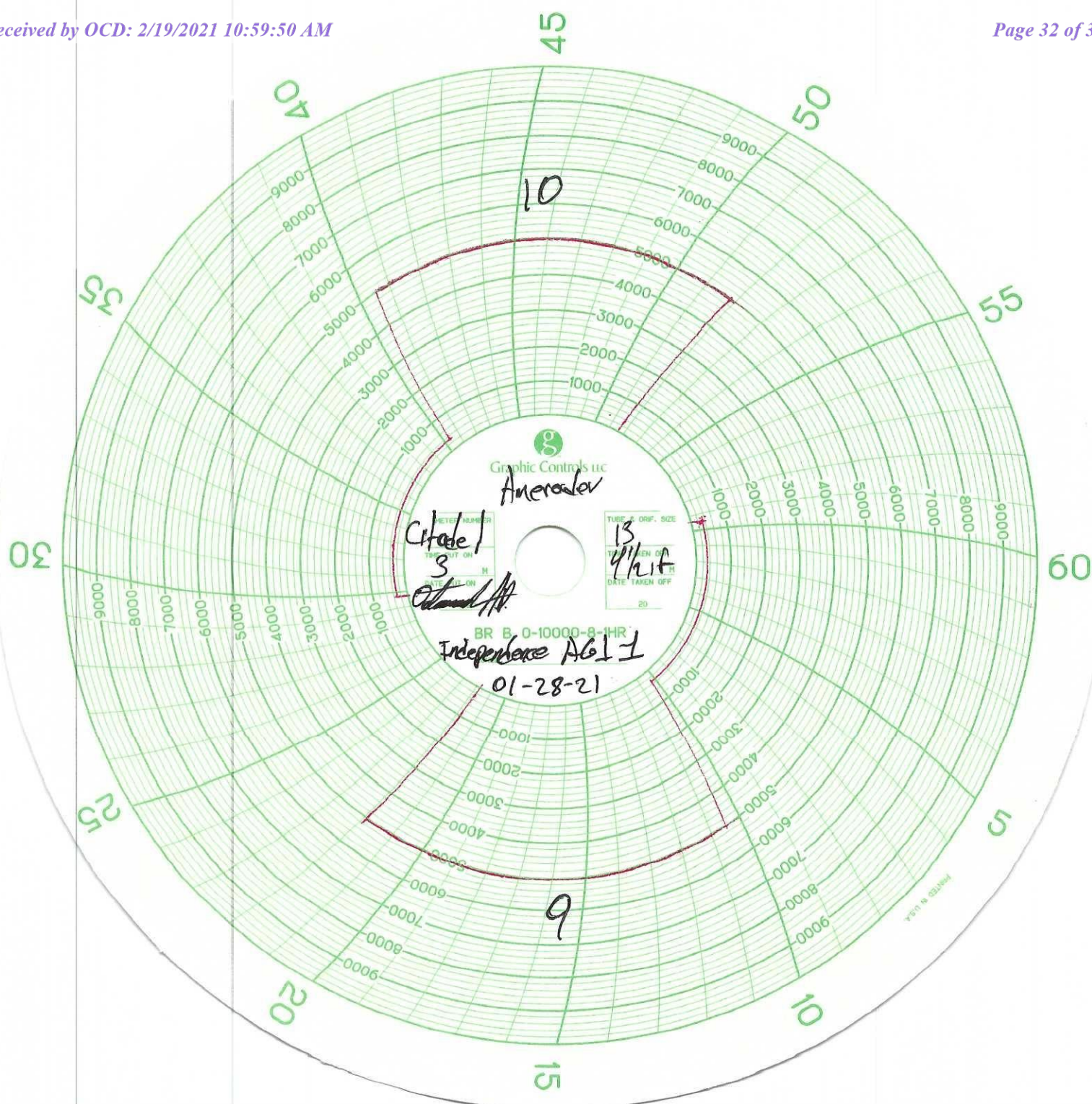
TEST ACCEPTED BY

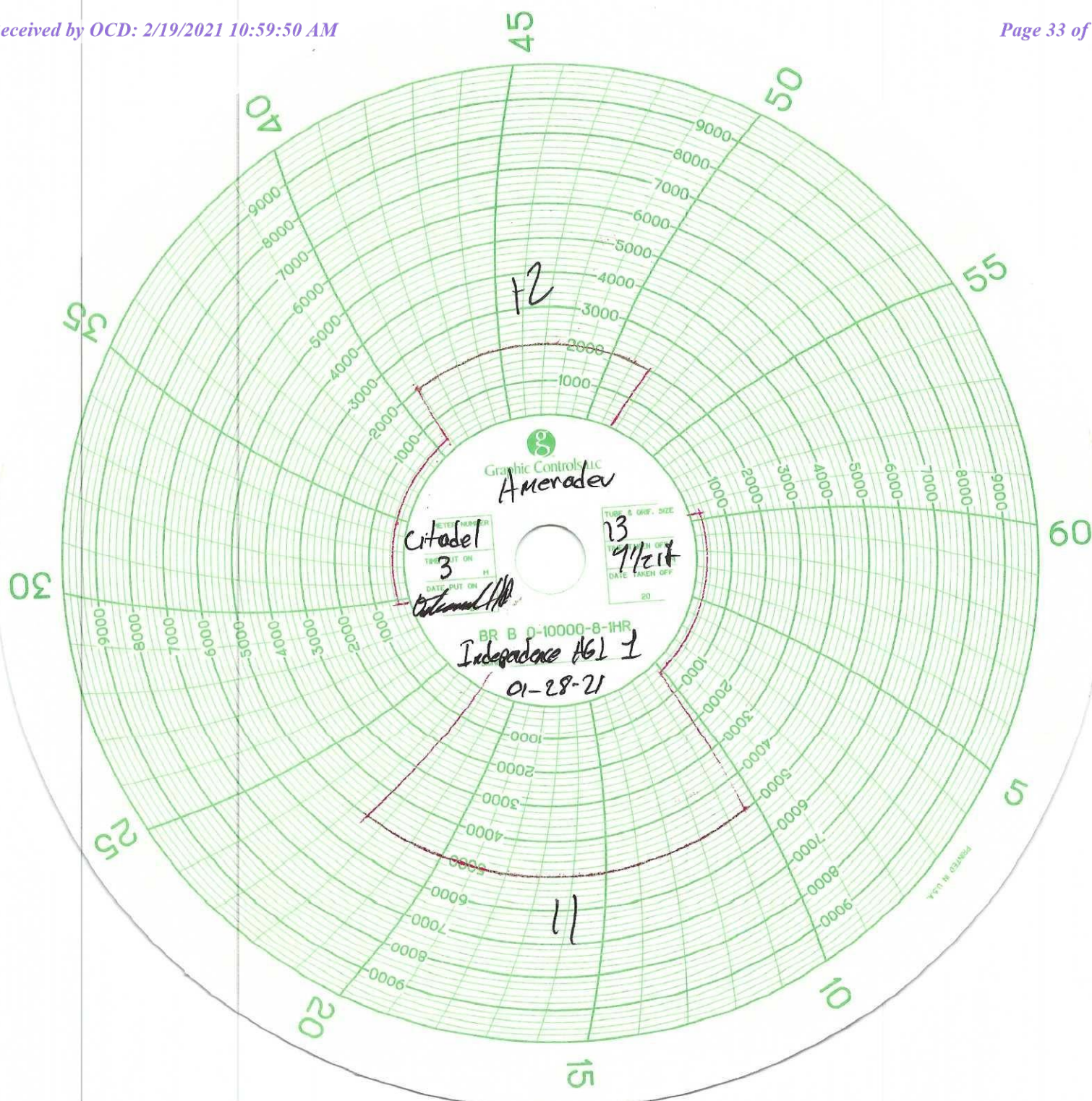


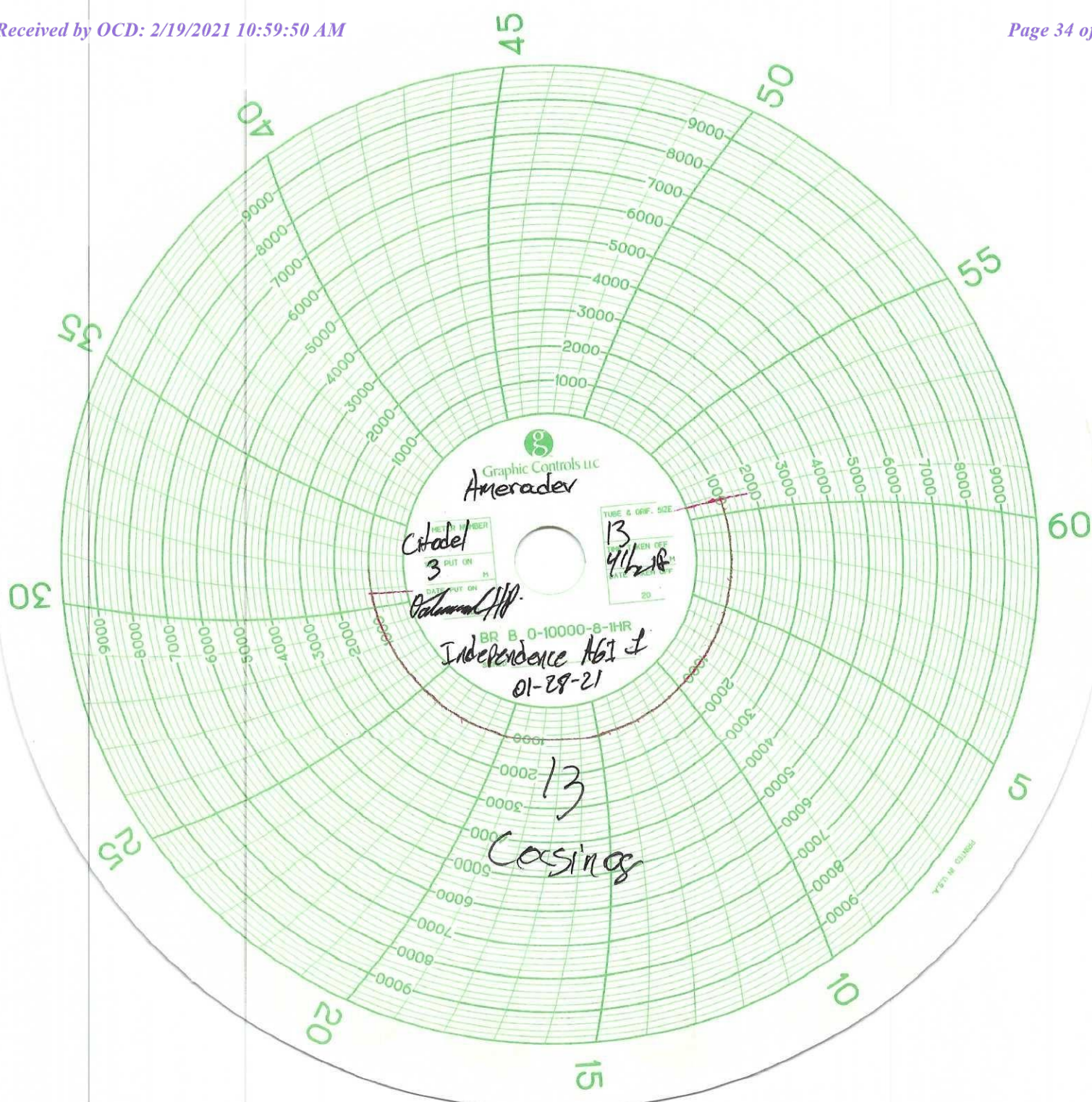


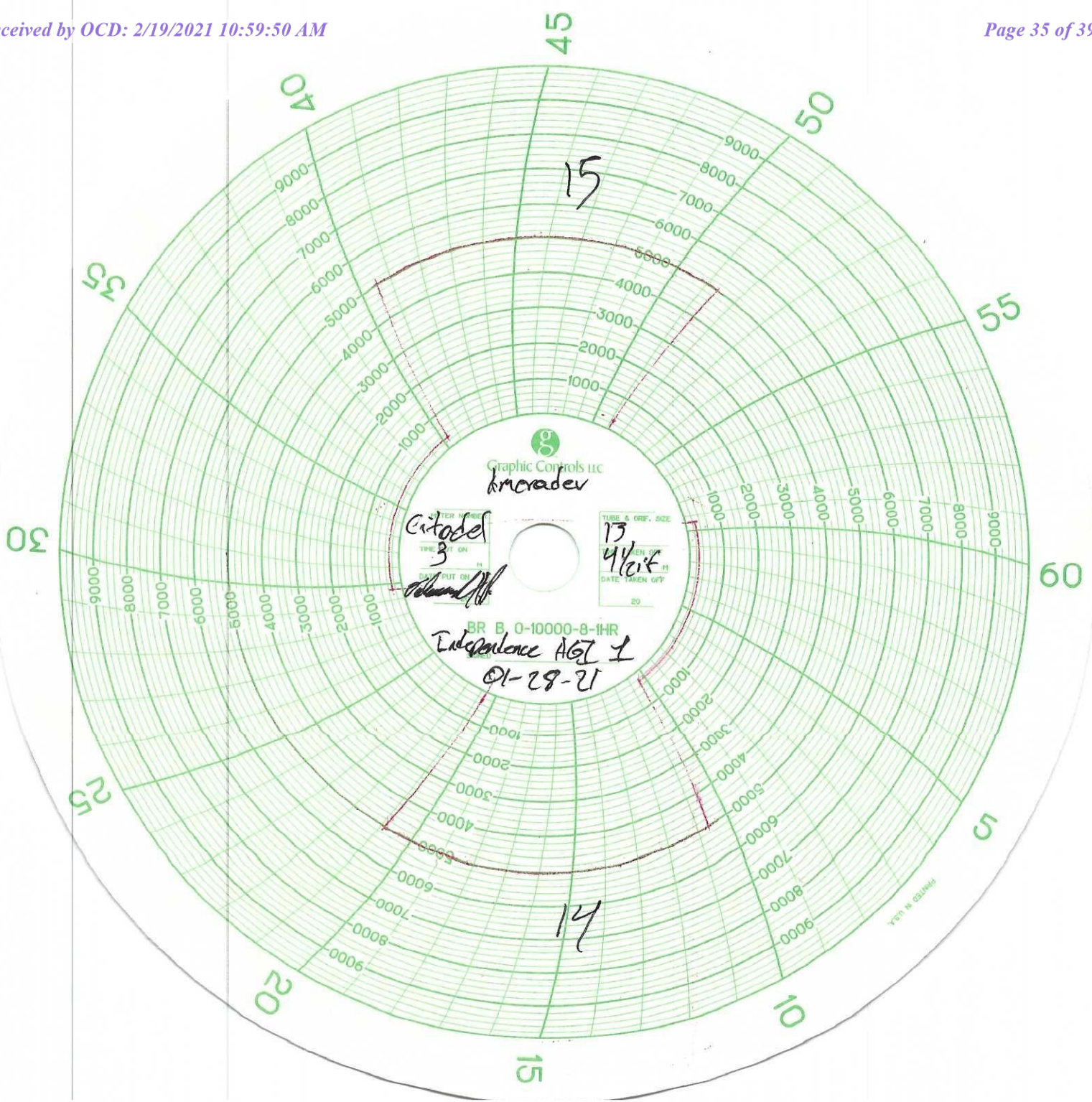


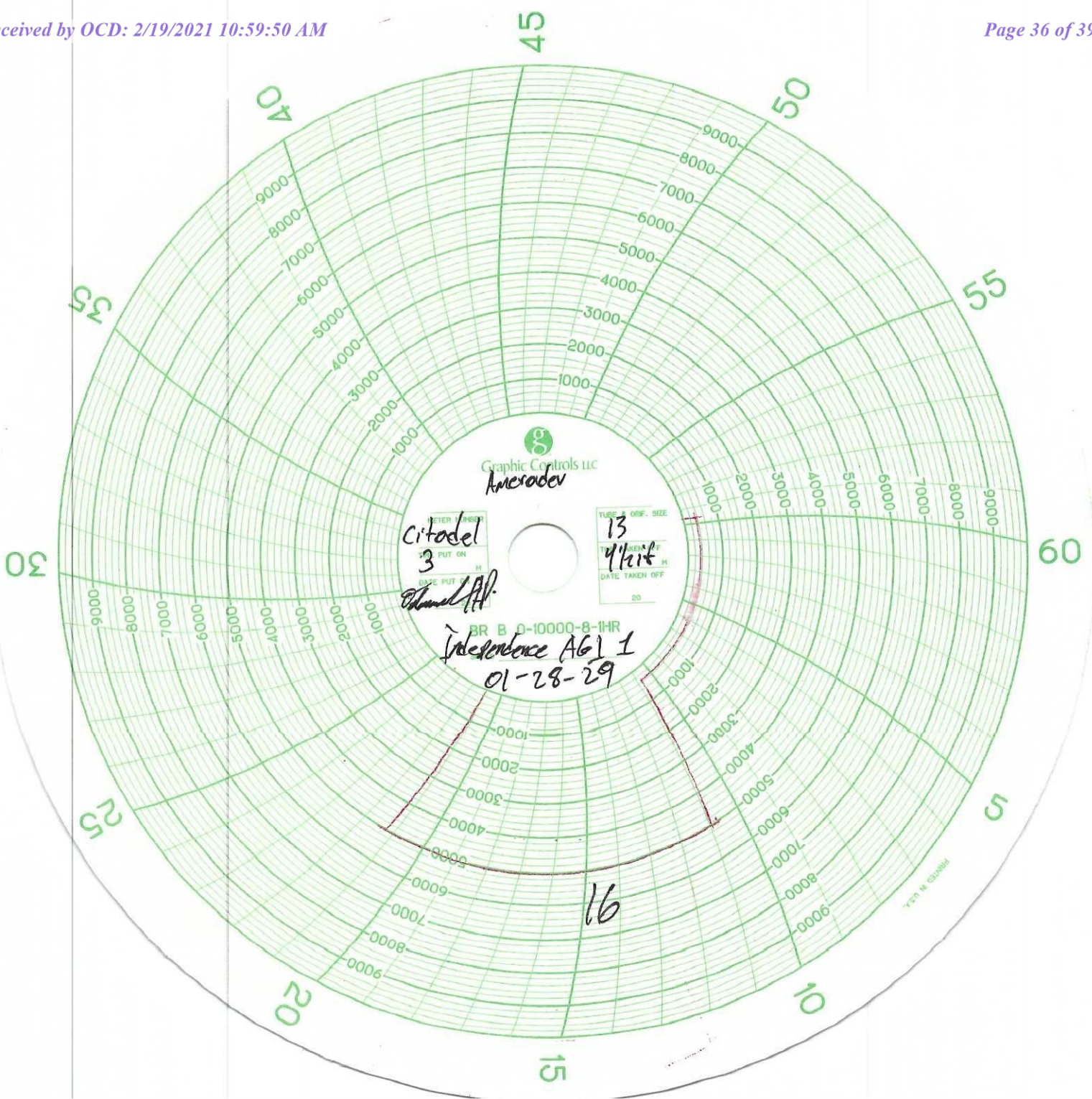




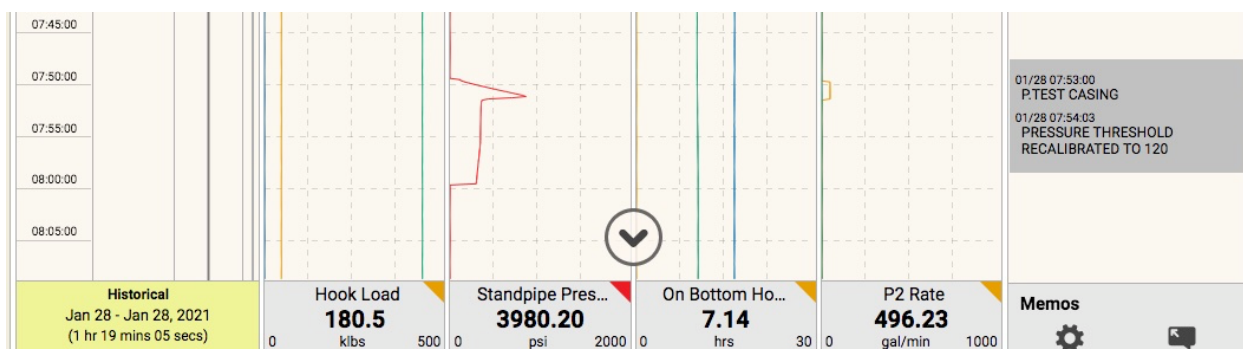




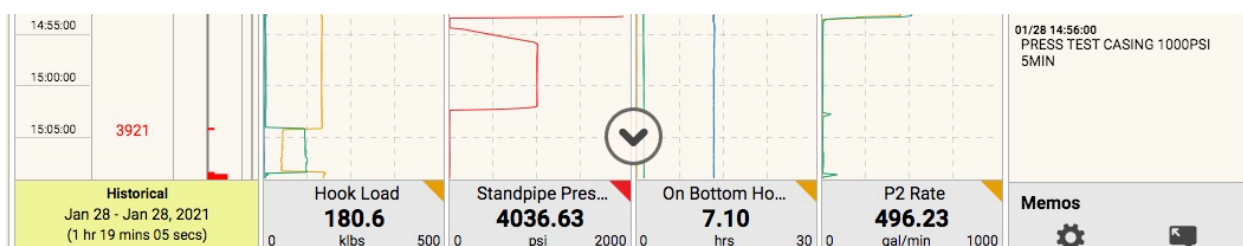




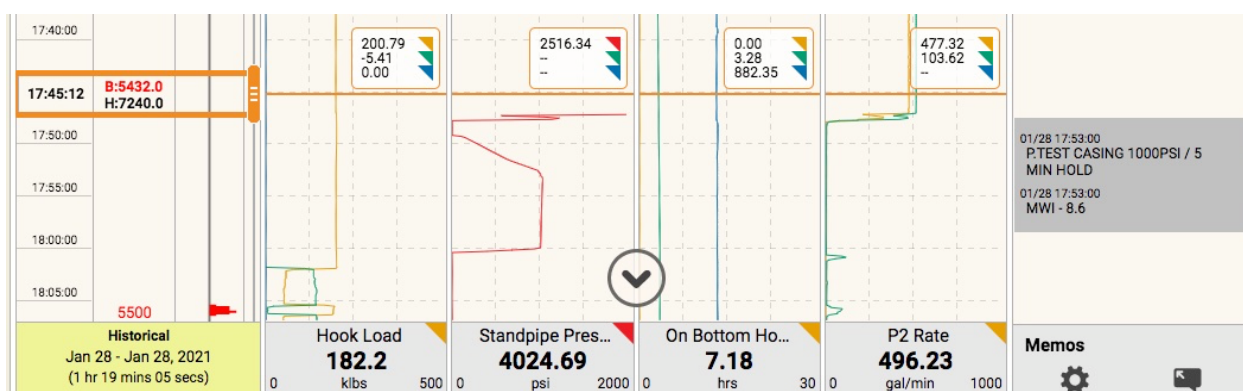
Casing Test and FIT following the installation of the 2nd Intermediate Casing (13 5/8-inch)



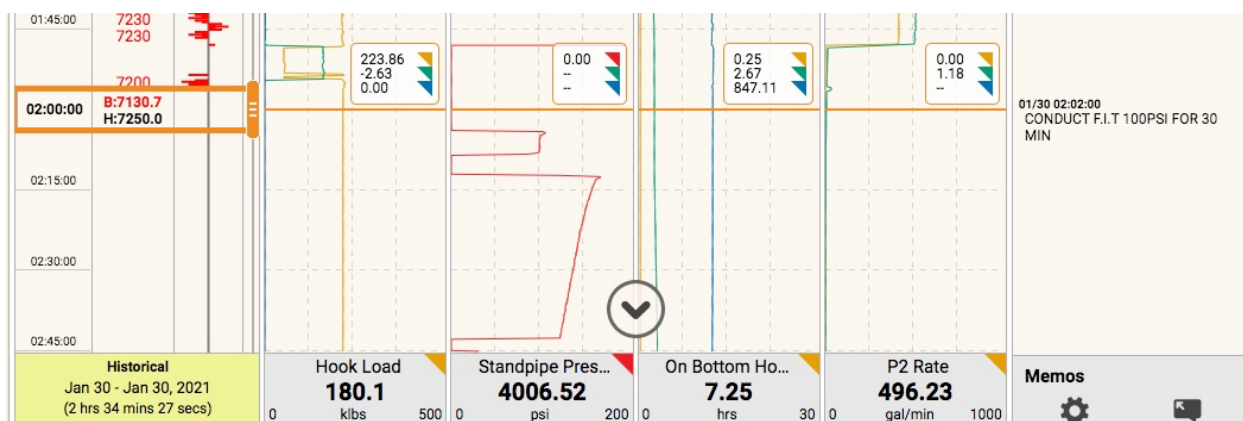
Casing Test: Prior to drilling out the upper DV Tool (also included with BOP test charts)



Casing Test: Following the drill-out of the upper DV Tool



Casing Test: Following the drill-out of the lower DV Tool

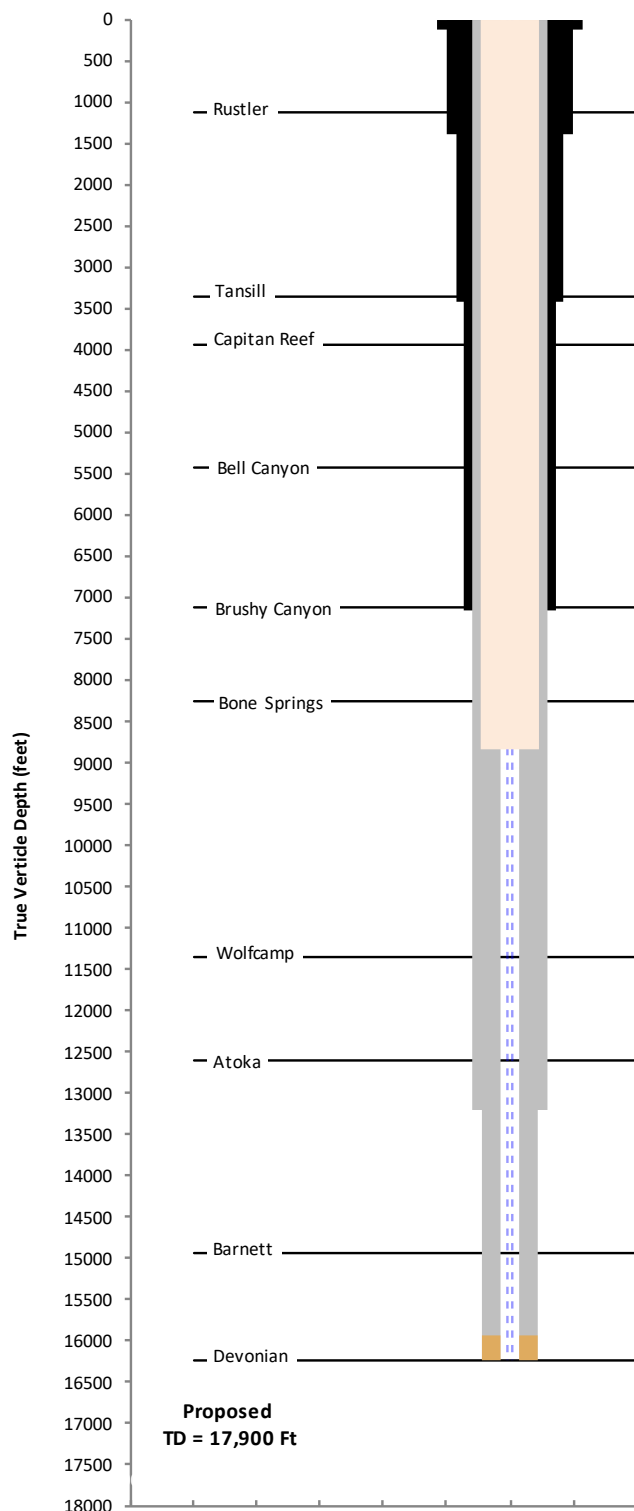


Formation Integrity Test: Following the drilling of 10 feet of formation below casing shoe

Well Name: Ameredev Independence AGI #1 (API: 30-025-48081)

Surface Location: Section 20, T-25-S, R-36-E, Lea Co., New Mexico
(829' FNL & 1443' FWL) - GL: 3,103' (KB: 24.5')

GEOLEX[®]
INCORPORATED

**CONDUCTOR CASING:**

36", 125.72 lb/ft, at 116 ft, cement to surface

SURFACE CASING:

24-inch, X65, 186 lb/ft, XLF casing at 0-1,383 ft in 26-in hole (35 jts) , cmt to surf (129 sx)

1ST INTERMEDIATE CASING:

20-inch, NT-80DE, 133 lb/ft, BTC casing at 0-3412 ft in 22-in hole, did not circ. cmt. to surf.
An additional 30 bbls of cement was placed with 3/4-inch spear, circulated to surface (29 sx)

DV/ECP in 13 5/8-in casing at 3,819 to 3,839 ft

DV/ECP in 13 5/8-in casing at 5,350 to 5,370 ft

2ND INTERMEDIATE CASING:

13 5/8-inch, Q-125, 88.2 lb/ft, BTC casing at 0-7150 ft in 17 1/2-in hole, cmt to surf (207 sx)

CURRENT DEPTH = 8,832 Feet with 12 1/4-inch bit.

3RD INTERMEDIATE CASING:

9 5/8-inch, L80-HC, 47 lb/ft, BTC casing at 0-9000 ft in 12 1/4-in hole, cmt to surf (297 sx)
9 5/8-inch, P110HP, 47 lb/ft, BTC csg at 9,000-13,200 ft in 12 1/4-in hole

PRODUCTION CASING:

7-inch, VA HC P110, 32 lb/ft, VARN, casing at 0-15,930 ft in 8 1/2-in hole, cmt to surf (297 sx)

Proposed TD Location: Section 20, T-25-S, R-36-E, Lea Co., New Mexico
(829' FNL & 1443' FWL)

AMEREDEV

Independence AGI #1

Plate 1

Wellbore Completion Schematic

February 2, 2021

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 18345

CONDITIONS

Operator: AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746	OGRID: 372224
	Action Number: 18345
	Action Type: [C-103] Sub. Drilling (C-103N)

CONDITIONS

Created By	Condition	Condition Date
ksimmons	None	8/3/2021