

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

JUL 13 2009

Form C-103
May 27, 2004

Rm

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. 30-015-37068
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator NADEL AND GUSSMAN HEYCO, LLC		6. State Oil & Gas Lease No.
3. Address of Operator PO BOX 1936 ROSWELL NM 88202-1936		7. Lease Name or Unit Agreement Name Aid State
4. Well Location Unit Letter <u>O</u> : <u>330</u> feet from the <u>SOUTH</u> line and <u>1650</u> feet from the <u>EAST</u> line Section <u>13</u> Township <u>17S</u> Range <u>28E</u> NMPM County <u>EDDY</u>		8. Well Number #2
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3704' GR		9. OGRID Number 258462
Pit or Below-grade Tank Application ☐ or Closure ☐		10. Pool name or Wildcat EMPIRE GLORIETA-YESO
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____		
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☒	
OTHER: ☐		OTHER: See Attached Csg and Cmt Report ☒	

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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

6/27/09 TD 11" hole at 317'. Total pipe ran 8 jts of 8 5/8" 24# J-55 LTC ran with 5 centralizers. Set casing at 317'. Cmt was 215 sx Class C with 2% S1 yield 1.34. Bumped plug at 4:35 pm with 660 psi, did not circulate cement to surface WOC 5 hours. Ran temperature survey showed top of cmt 60", went in with 1" pipe tagged up at 35'. Pumped 32 sx of Class C with 2% S1 yield 1.34 and circulated 5 sx to pit.

7/07/2009 TD 5335' @ 5:30 pm, RU/Halliburton w/logging tools, log well.

7/9/09 RU csg crew and run 138 jts 5 1/2 17# J-55 LT&C csg set @ 5326', RU Schlumberger and cmt with Lead 700 SX 35/65 POZ C and 750 Sx PVL cmt plug dn @ 7:59 p.m. RD Schlumberger. nd bop set slip w/85K, cut off 5 1/2" csg, layed dn bop.

7/10/09 Rig Release @ 11:00 p.m. 7/9/09.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Larry R. Link TITLE PRODUCTION ANALYST DATE 7/10/09

Type or print name _____ E-mail address: tlink@heycoenergy.com Telephone No. 505.623.6601
For State Use Only

APPROVED BY: Jacqueline TITLE Geologist DATE 7/15/09
Conditions of Approval (if any): _____

SUMMARY CASING AND CEMENTING REPORT

STRING:

SURFACE

DATE: 7/092009

OPERATOR: NADEL & GUSSMAN HEYCO

WELL: AID STATE #2

CONTRACTOR: EAGLE ROCK

RIG: #5

REP: KEITH CANNON

CASING DETAIL

HOLE SIZE: 7 7/8"

DEPTH: 5335

7 7/8" HOLE	5335.00
FLOAT SHOE	<u>1.38</u>
	5333.62
2 JTS 5 1/2" 17 # J-55 LTC Csg	<u>76.66</u>
	5256.96
5 1/2" FLOAT COLLAR	<u>1.10</u>
	5255.86
137 JTS 5 1/2" 17# J-55 LTC Csg	<u>5245.87</u>
	9.99
KB TO GL	<u>10.60</u>
	0.61

CENTRALIZERS PLACED @ 5295.62, 5256.96, 5216.87, 5137.94, 5060.12, 4982.20, 4905.33, 4827.74, 4751.37, 4674.14, 4520.97, 4444.30, 4405.85, 4367.06, 4290.53, 4215.27, 4138.71, 4060.67, 3981.44, 3906.80

REMARKS:

TOTAL CASING DELIVERED.... 139 JTS 5 1/2" 17# J-55 LT&C (5420.42')

ALL CASING WAS DRIFTED, CLEANED, & VISUALLY INSPECTED ON LOCATION.

FLOAT SHOE, 2 SHOE JTS, FLOAT COLLAR, & WERE THREAD LOCKED.

TAGGED BOTTOM 5335'. CIRCULATED CAPACITY & ANNULAR VOLUME

BEFORE PUMPING CEMENT. NO PROBLEMS WITH CSG OR CMT JOB. PLUG DN @ 7:59 PM

7/9/09, HIT PLUG W/500PSI OVER.

EXCESS CASING

CASING NOT USED 1 JTS 5 1/2" 17# J-55 LTC [37.92'].

DISPOSITION 5 1/2" 17# J-55 WILL SEND BACK TO KC PIPE

CEMENTING DATA

COMPANY: SCHLUMBERGER

DISTRICT: ARTESIA

1ST STAGE:

PREFLUSH: 20 bbls FW

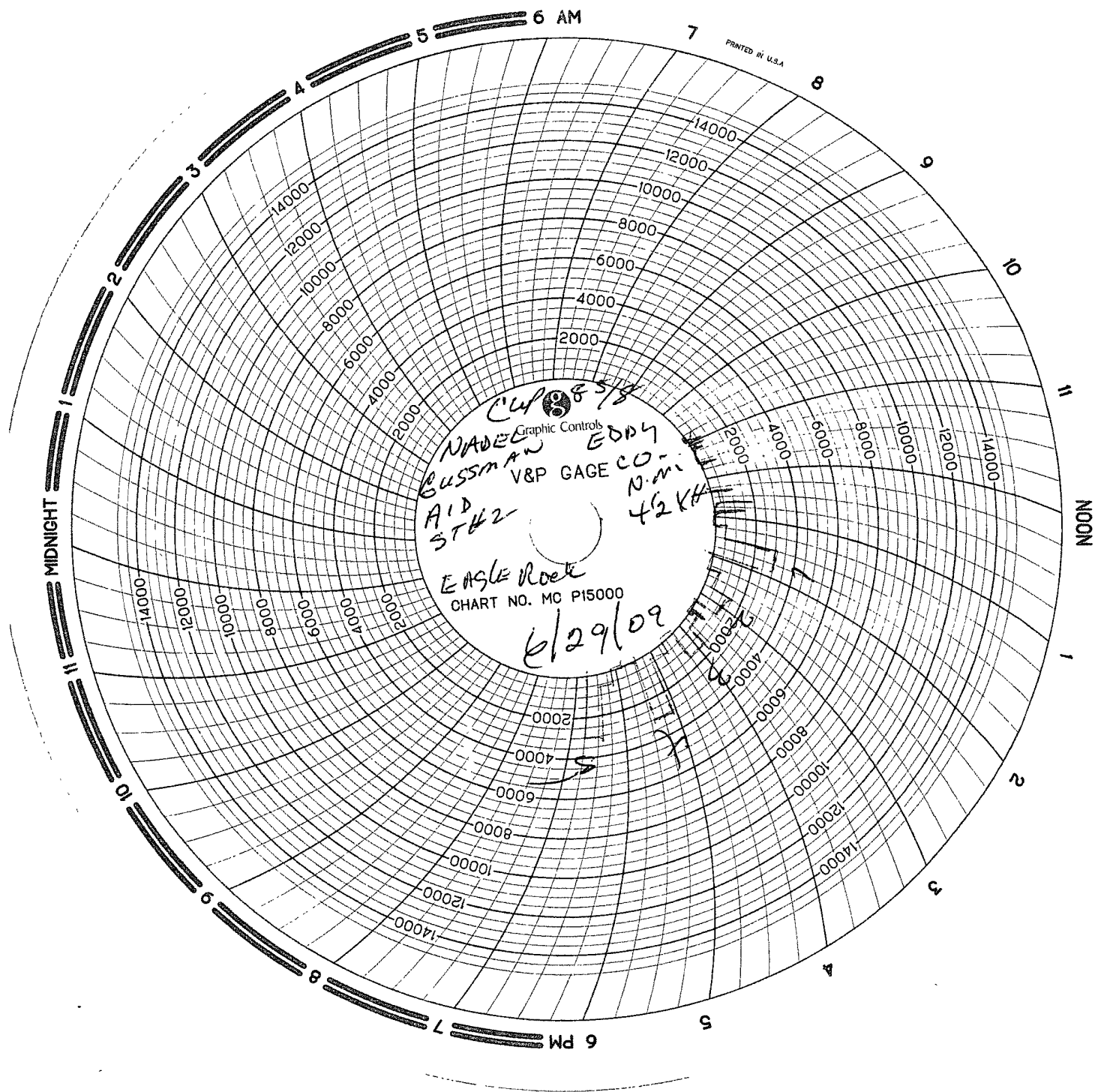
LEAD: 700 sx Cement 35/65 POZ, + 5%D44 (BWOW)+6%D20+0.2%D46+0.125. 12.40lb/Gal,
YIELD 2.17, MIX WATER 12.41 ft3/SK

TAIL: 750 sx PVL+1.3%D44(BWOW)+0.2%dl67+0.2%D65+0.2%D46+2P, 13.00lb/Gal, YIELD
1.42, MIX WATER 7.19 ft3/sk

DATE : 7/7/2009		WELL :		Aid State #2						
Casing OD	5 1/2	Grade	J-55	Displacement bbl/ft	0.00613	Burst	5335	Torque		
Casing ID	8.097	Weight	17#	Capacity bbl/ft	0.02324	Collapse	4910	2270-2840		
Jt # or Item	Item or Jt. Lgth.	Total Length	Calc'd disp / jt	Calc'd tot disp	Actual tot disp	Calc Bbl to fill jt	Calc tot fill	Actual tot fill	Remarks Centrilizers	Depth 5335
1	1.38	1.38	0.0085	0.0085		0.032071	0.0321		Guide shoe	5333.62
2	38.00	39.38	0.2329	0.2414		0.88312	0.9152		Centrilizers	5295.62
3	38.66	78.04	0.2370	0.4784		0.898458	1.8136		Centrilizers	5256.96
4	1.10	79.14	0.0067	0.4851		0.025564	1.8392		Float Collar	5255.86
5	38.99	118.13	0.2390	0.7241		0.906128	2.7453		Centrilizers	5216.87
6	39.75	157.88	0.2437	0.9678		0.92379	3.6691			5177.12
7	39.18	197.06	0.2402	1.2080		0.910543	4.5797		Centrilizers	5137.94
8	39.66	236.72	0.2431	1.4511		0.921698	5.5014			5098.28
9	38.16	274.88	0.2339	1.6850		0.886838	6.3882		Centrilizers	5060.12
10	38.96	313.84	0.2388	1.9238		0.90543	7.2936			5021.16
11	38.96	352.80	0.2388	2.1627		0.90543	8.1991		Centrilizers	4982.20
12	38.58	391.38	0.2365	2.3992		0.896599	9.0957			4943.62
13	38.29	429.67	0.2347	2.6339		0.88986	9.9855		Centrilizers	4905.33
14	39.70	469.37	0.2434	2.8772		0.922628	10.9082			4865.63
15	37.89	507.26	0.2323	3.1095		0.880564	11.7887		Centrilizers	4827.74
16	37.20	544.46	0.2280	3.3375		0.864528	12.6533			4790.54
17	39.17	583.63	0.2401	3.5777		0.910311	13.5636		Centrilizers	4751.37
18	39.08	622.71	0.2396	3.8172		0.908219	14.4718			4712.29
19	38.15	660.86	0.2339	4.0511		0.886606	15.3584		Centrilizers	4674.14
20	37.56	698.42	0.2302	4.2813		0.872894	16.2313			4636.58
21	37.31	735.73	0.2287	4.5100		0.867084	17.0984		Centrilizers	4599.27
22	39.20	774.93	0.2403	4.7503		0.911008	18.0094			4560.07
23	39.10	814.03	0.2397	4.9900		0.908684	18.9181		Centrilizers	4520.97
24	38.44	852.47	0.2356	5.2256		0.893346	19.8114			4482.53
25	38.23	890.70	0.2343	5.4600		0.888465	20.6999		Centrilizers	4444.30
26	38.45	929.15	0.2357	5.6957		0.893578	21.5934			4405.85
27	38.79	967.94	0.2378	5.9335		0.90148	22.4949		Centrilizers	4367.06
28	38.20	1006.14	0.2342	6.1676		0.887768	23.3827			4328.86
29	38.33	1044.47	0.2350	6.4026		0.890789	24.2735		Centrilizers	4290.53
30	38.21	1082.68	0.2342	6.6368		0.888	25.1615			4252.32
31	37.05	1119.73	0.2271	6.8639		0.861042	26.0225		Centrilizers	4215.27
32	37.35	1157.08	0.2290	7.0929		0.868014	26.8905			4177.92
33	39.21	1196.29	0.2404	7.3333		0.91124	27.8018		Centrilizers	4138.71
34	39.29	1235.58	0.2408	7.5741		0.9131	28.7149			4099.42
35	38.75	1274.33	0.2375	7.8116		0.90055	29.6154		Centrilizers	4060.67
36	39.10	1313.43	0.2397	8.0513		0.908684	30.5241			4021.57
37	40.13	1353.56	0.2460	8.2973		0.932621	31.4567		Centrilizers	3981.44
38	37.18	1390.74	0.2279	8.5252		0.864063	32.3208			3944.26
39	37.46	1428.20	0.2296	8.7549		0.87057	33.1914		Centrilizers	3906.80
40	39.47	1467.67	0.2420	8.9968		0.917283	34.1087			3867.33
41	37.33	1505.00	0.2288	9.2257		0.867549	34.9762			3830.00
42	37.80	1542.80	0.2317	9.4574		0.878472	35.8547			3792.20
43	34.98	1577.78	0.2144	9.6718		0.812935	36.6676			3757.22
44	37.99	1615.77	0.2329	9.9047		0.882888	37.5505			3719.23
45	38.00	1653.77	0.2329	10.1376		0.88312	38.4336			3681.23

46	38.14	1691.91	0.2338	10.3714		0.886374	39.3200			3643.09
47	38.82	1730.73	0.2380	10.6094		0.902177	40.2222			3604.27
48	39.87	1770.60	0.2444	10.8538		0.926579	41.1487			3564.40
49	37.75	1808.35	0.2314	11.0852		0.87731	42.0261			3526.65
50	38.29	1846.64	0.2347	11.3199		0.88986	42.9159			3488.36
51	38.15	1884.79	0.2339	11.5538		0.886606	43.8025			3450.21
52	39.35	1924.14	0.2412	11.7950		0.914494	44.7170			3410.86
53	38.90	1963.04	0.2385	12.0334		0.904036	45.6210			3371.96
54	38.37	2001.41	0.2352	12.2686		0.891719	46.5128			3333.59
55	38.43	2039.84	0.2356	12.5042		0.893113	47.4059			3295.16
56	39.08	2078.92	0.2396	12.7438		0.908219	48.3141			3256.08
57	38.45	2117.37	0.2357	12.9795		0.893578	49.2077			3217.63
58	39.12	2156.49	0.2398	13.2193		0.909149	50.1168			3178.51
59	39.15	2195.64	0.2400	13.4593		0.909846	51.0267			3139.36
60	38.92	2234.56	0.2386	13.6979		0.904501	51.9312			3100.44
61	38.34	2272.90	0.2350	13.9329		0.891022	52.8222			3062.10
62	39.25	2312.15	0.2406	14.1735		0.91217	53.7344			3022.85
63	37.63	2349.78	0.2307	14.4042		0.874521	54.6089			2985.22
64	37.50	2387.28	0.2299	14.6340		0.8715	55.4804			2947.72
65	38.98	2426.26	0.2389	14.8730		0.905895	56.3863			2908.74
66	38.93	2465.19	0.2386	15.1116		0.904733	57.2910			2869.81
67	38.56	2503.75	0.2364	15.3480		0.896134	58.1872			2831.25
68	37.97	2541.72	0.2328	15.5807		0.882423	59.0696			2793.28
69	38.70	2580.42	0.2372	15.8180		0.899388	59.9690			2754.58
70	38.65	2619.07	0.2369	16.0549		0.898226	60.8672			2715.93
71	39.28	2658.35	0.2408	16.2957		0.912867	61.7801			2676.65
72	37.90	2696.25	0.2323	16.5280		0.880796	62.6609			2638.75
73	37.61	2733.86	0.2305	16.7586		0.874056	63.5349			2601.14
74	38.80	2772.66	0.2378	16.9964		0.901712	64.4366			2562.34
75	38.57	2811.23	0.2364	17.2328		0.896367	65.3330			2523.77
76	38.46	2849.69	0.2358	17.4686		0.89381	66.2268			2485.31
77	39.98	2889.67	0.2451	17.7137		0.929135	67.1559			2445.33
78	40.16	2929.83	0.2462	17.9599		0.933318	68.0892			2405.17
79	38.90	2968.73	0.2385	18.1983		0.904036	68.9933			2366.27
80	38.20	3006.93	0.2342	18.4325		0.887768	69.8811			2328.07
81	37.82	3044.75	0.2318	18.6643		0.878937	70.7600			2290.25
82	40.00	3084.75	0.2452	18.9095		0.9296	71.6896			2250.25
83	38.95	3123.70	0.2388	19.1483		0.905198	72.5948			2211.30
84	39.80	3163.50	0.2440	19.3923		0.924952	73.5197			2171.50
85	39.17	3202.67	0.2401	19.6324		0.910311	74.4301			2132.33
86	38.46	3241.13	0.2358	19.8681		0.89381	75.3239			2093.87
87	38.80	3279.93	0.2378	20.1060		0.901712	76.2256			2055.07
88	39.51	3319.44	0.2422	20.3482		0.918212	77.1438			2015.56
89	39.21	3358.65	0.2404	20.5885		0.91124	78.0550			1976.35
90	38.84	3397.49	0.2381	20.8266		0.902642	78.9577			1937.51
91	38.76	3436.25	0.2376	21.0642		0.900782	79.8585			1898.75
92	37.71	3473.96	0.2312	21.2954		0.87638	80.7348			1861.04
93	39.19	3513.15	0.2402	21.5356		0.910776	81.6456			1821.85
94	38.56	3551.71	0.2364	21.7720		0.896134	82.5417			1783.29
95	37.33	3589.04	0.2288	22.0008		0.867549	83.4093			1745.96
96	38.56	3627.60	0.2364	22.2372		0.896134	84.3054			1707.40
97	39.15	3666.75	0.2400	22.4772		0.909846	85.2153			1668.25

98	37.46	3704.21	0.2296	22.7068		0.87057	86.0858			1630.79
99	38.38	3742.59	0.2353	22.9421		0.891951	86.9778			1592.41
100	39.67	3782.26	0.2432	23.1853		0.921931	87.8997			1552.74
101	39.61	3821.87	0.2428	23.4281		0.920536	88.8203			1513.13
102	37.39	3859.26	0.2292	23.6573		0.868944	89.6892			1475.74
103	38.72	3897.98	0.2374	23.8946		0.899853	90.5891			1437.02
104	38.26	3936.24	0.2345	24.1292		0.889162	91.4782			1398.76
105	39.52	3975.76	0.2423	24.3714		0.918445	92.3967			1359.24
106	38.78	4014.54	0.2377	24.6091		0.901247	93.2979			1320.46
107	39.01	4053.55	0.2391	24.8483		0.906592	94.2045			1281.45
108	35.45	4089.00	0.2173	25.0656		0.823858	95.0284			1246.00
109	38.70	4127.70	0.2372	25.3028		0.899388	95.9277			1207.30
110	39.15	4166.85	0.2400	25.5428		0.909846	96.8376			1168.15
111	38.45	4205.30	0.2357	25.7785		0.893578	97.7312			1129.70
112	38.09	4243.39	0.2335	26.0120		0.885212	98.6164			1091.61
113	38.35	4281.74	0.2351	26.2471		0.891254	99.5076			1053.26
114	37.96	4319.70	0.2327	26.4798		0.88219	100.3898			1015.30
115	38.55	4358.25	0.2363	26.7161		0.895902	101.2857			976.75
116	38.13	4396.38	0.2337	26.9498		0.886141	102.1719			938.62
117	39.12	4435.50	0.2398	27.1896		0.909149	103.0810			899.50
118	39.23	4474.73	0.2405	27.4301		0.911705	103.9927			860.27
119	39.20	4513.93	0.2403	27.6704		0.911008	104.9037			821.07
120	39.21	4553.14	0.2404	27.9107		0.91124	105.8150			781.86
121	38.45	4591.59	0.2357	28.1464		0.893578	106.7086			743.41
122	38.39	4629.98	0.2353	28.3818		0.892184	107.6007			705.02
123	38.92	4668.90	0.2386	28.6204		0.904501	108.5052			666.10
124	38.70	4707.60	0.2372	28.8576		0.899388	109.4046			627.40
125	39.34	4746.94	0.2412	29.0987		0.914262	110.3189			588.06
126	39.03	4785.97	0.2393	29.3380		0.907057	111.2259			549.03
127	39.01	4824.98	0.2391	29.5771		0.906592	112.1325			510.02
128	36.98	4861.96	0.2267	29.8038		0.859415	112.9920			473.04
129	38.93	4900.89	0.2386	30.0425		0.904733	113.8967			434.11
130	38.68	4939.57	0.2371	30.2796		0.898923	114.7956			395.43
131	39.35	4978.92	0.2412	30.5208		0.914494	115.7101			356.08
132	39.20	5018.12	0.2403	30.7611		0.911008	116.6211			316.88
133	38.98	5057.10	0.2389	31.0000		0.905895	117.5270			277.90
134	39.20	5096.30	0.2403	31.2403		0.911008	118.4380			238.70
135	37.06	5133.36	0.2272	31.4675		0.861274	119.2993			201.64
136	39.09	5172.45	0.2396	31.7071		0.908452	120.2077			162.55
137	37.78	5210.23	0.2316	31.9387		0.878007	121.0857			124.77
138	38.51	5248.74	0.2361	32.1748		0.894972	121.9807			86.26
139	37.27	5286.01	0.2285	32.4032		0.866155	122.8469			48.99
140	39.00	5325.01	0.2391	32.6423		0.90636	123.7532			9.99
141	37.92	5362.93	0.2324	32.8748		0.881261	124.6345		Out	-27.93
142	0.00	5362.93	0.0000	32.8748		0	124.6345			-27.93
143	0.00	5362.93	0.0000	32.8748		0	124.6345			-27.93
144	0.00	5362.93	0.0000	32.8748		0	124.6345			-27.93
145	0.00	5362.93	0.0000	32.8748		0	124.6345			-27.93
146	0.00	5362.93	0.0000	32.8748		0	124.6345			-27.93
147	0.00	5362.93	0.0000	32.8748		0	124.6345			-27.93
148	0.00	5362.93	0.0000	32.8748		0	124.6345			-27.93
149	0.00	5362.93	0.0000	32.8748		0	124.6345			-27.93



MAN WELDING SERVICES, INC

Company NADEL & Gussman Date 6/28/09
Lease AID ST #2 County EDDY Co. N.M.
Drilling Contractor EAGLE Rock 5 Plug & Drill Pipe Size 8 5/8 cup 4 1/2 XH

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)

- N/A
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 1500 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.

16" Fluid = 66 gal

66 x 14 x 36 = 150 gal = 4.1 gal Per 1"

6-10 gal Nit Bottles = 30 gal

66
96 gal usable fluid

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

- 1500
- 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 1000 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.

- N/A
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 46 sec. Test fails if it takes over 2 minutes.

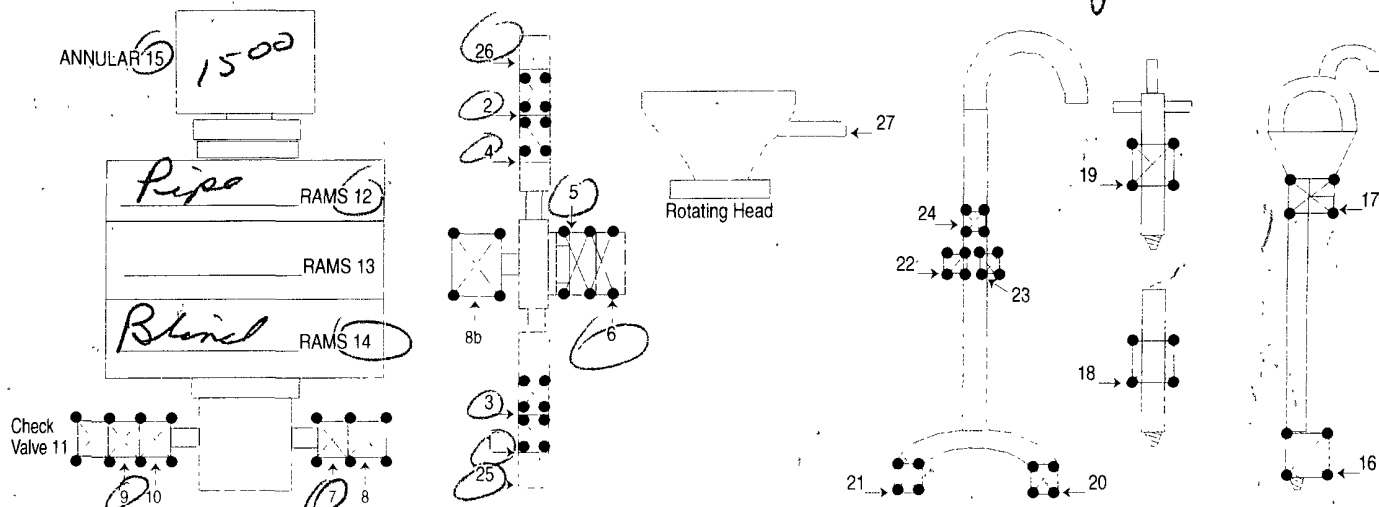
- a. {950 psi for a 1500 psi system} b. {1200 psi for a 2000 & 3000 psi system}

MAN WELDING SERVICES

WELDING • BOP TESTING • BOP LIFTS • TANDEM
NIPPLE UP SERVICE • BOP LIFTS • TANDEM
MUD AND GAS SEPARATORS
Lovington, NM • 575-396-4540

INVOICE
N2 B 10118

Company NADEL & Gussman Date 6/28/09 Start Time 9:30 ☐ am ☐ pm
Lease AID ST #2 County EDDY State NM
Company Man Keith C.
Wellhead Vendor _____ Tester Kenny Kirkpatrick
Drlg. Contractor _____ Rig # 5
Tool Pusher Glynn Crawford
Plug Type cup Plug Size 8 5/8 Drill Pipe Size 4 1/2 XH
Casing Valve Opened NO Check Valve Open yes

[illegible]

8 HR@ 1000⁰⁰ 1000⁰⁰
HR@
Mileage 108 @ 100⁰⁰ = 108⁰⁰
MASTER PRINTERS 575 396 3661. 1108⁰⁰

SUB TOTAL	1108 ⁰⁰
TAX	59 ⁵⁵
TOTAL	1167 ⁵⁵

Schlumberger

Job Date: 07-09-2009

Customer: NADEL & GUSSMAN HEYCO

District: Artesia

Representative: MR. KEITH CANNON

DS Supervisor: Anthony Granados

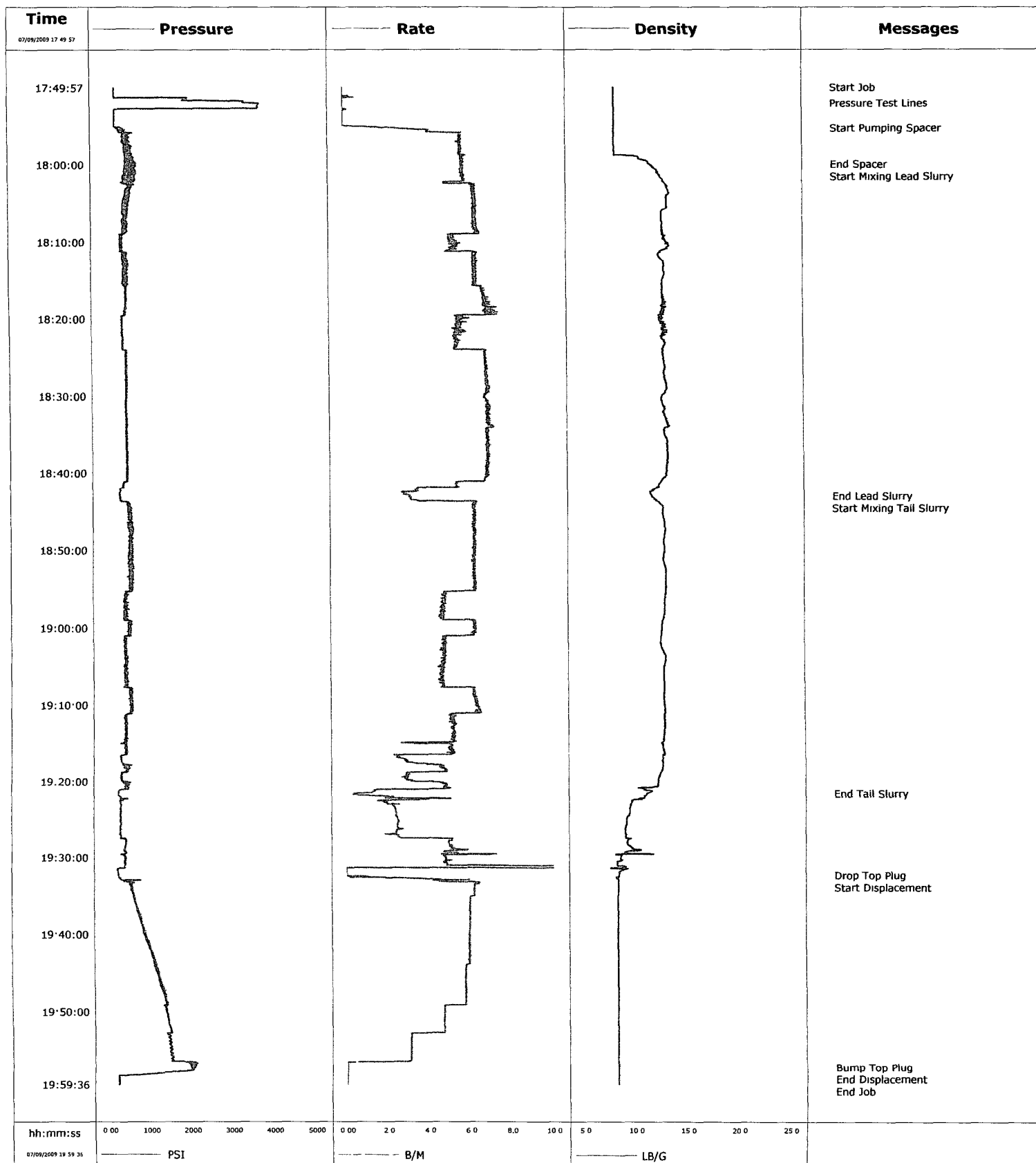
Well: AID STATE , 2

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure psi	Flow Rate bbl/min	Density lb/gal	Volume bbl
07:09:2009:17:49:57	226	0.0	8.27	0.0
07:09:2009:17:49:58	Start Job			
07:09:2009:17:49:58	226	0.0	8.27	0.0
07:09:2009:17:51:57	3355	0.0	8.27	0.0
07:09:2009:17:52:00	Pressure Test Lines			
07:09:2009:17:52:00	3727	0.0	8.27	0.0
07:09:2009:17:53:57	230	0.0	8.27	0.1
07:09:2009:17:55:15	Start Pumping Spacer			
07:09:2009:17:55:15	344	2.5	8.27	0.5
07:09:2009:17:55:58	533	5.6	8.29	2.7
07:09:2009:17:57:58	582	5.6	8.29	14.0
07:09:2009:17:59:58	560	5.7	11.70	25.5
07:09:2009:18:00:00	End Spacer			
07:09:2009:18:00:00	746	5.7	11.74	25.7
07:09:2009:18:00:03	Start Mixing Lead Slurry			
07:09:2009:18:00:03	543	5.8	11.75	26.0
07:09:2009:18:01:58	475	5.8	12.96	10.4
07:09:2009:18:03:58	552	6.2	13.44	22.5
07:09:2009:18:05:58	494	6.3	12.92	35.2
07:09:2009:18:07:59	472	6.3	12.86	48.0
07:09:2009:18:09:59	382	5.1	13.18	59.6
07:09:2009:18:11:59	457	6.4	12.55	70.9
07:09:2009:18:13:59	469	6.4	13.01	83.6
07:09:2009:18:15:59	490	6.6	12.87	96.3
07:09:2009:18:18:00	462	6.8	12.95	109.9
07:09:2009:18:20:00	375	6.0	12.72	123.3
07:09:2009:18:22:00	387	5.5	12.93	134.4
07:09:2009:18:24:00	400	5.3	12.85	145.2
07:09:2009:18:26:00	463	6.8	13.06	158.7
07:09:2009:18:28:00	474	6.9	13.07	172.4
07:09:2009:18:30:01	464	6.8	12.81	186.3
07:09:2009:18:32:01	467	6.9	12.97	200.1
07:09:2009:18:34:01	481	7.2	13.43	214.0
07:09:2009:18:36:01	474	6.9	13.29	227.9
07:09:2009:18:38:01	486	7.0	13.32	241.7
07:09:2009:18:40:01	476	6.9	13.19	255.5
07:09:2009:18:42:02	305	3.5	12.21	267.9
07:09:2009:18:43:00	End Lead Slurry			
07:09:2009:18:43:00	294	3.1	11.72	270.9
07:09:2009:18:43:02	Start Mixing Tail Slurry			

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure psi	Flow Rate bbl/min	Density lb/gal	Volume bbl
07:09:2009:18:46:02	501	6.2	12.92	287.8
07:09:2009:18:48:02	564	6.2	12.95	300.2
07:09:2009:18:50:02	581	6.2	12.95	1.7
07:09:2009:18:52:02	555	6.3	12.99	51.3
07:09:2009:18:54:03	566	6.2	13.08	63.9
07:09:2009:18:56:03	416	4.8	13.04	75.4
07:09:2009:18:58:03	446	4.6	12.94	84.9
07:09:2009:19:00:03	557	6.2	12.69	95.8
07:09:2009:19:02:03	419	4.6	12.57	106.8
07:09:2009:19:04:03	413	4.8	13.05	116.3
07:09:2009:19:06:04	427	4.7	12.87	125.8
07:09:2009:19:08:04	501	6.1	12.88	135.6
07:09:2009:19:10:04	564	6.3	12.91	148.1
07:09:2009:19:12:04	405	5.1	12.90	159.7
07:09:2009:19:14:04	416	5.2	12.84	171.8
07:09:2009:19:16:05	440	5.2	12.82	181.8
07:09:2009:19:18:05	413	4.7	12.71	189.0
07:09:2009:19:20:05	448	4.0	12.26	196.3
07:09:2009:19:21:38	End Tail Slurry			
07:09:2009:19:21:38	238	0.7	11.22	201.8
07:09:2009:19:22:05	284	2.1	10.87	202.2
07:09:2009:19:24:05	282	2.4	9.43	2.4
07:09:2009:19:26:05	280	2.5	9.04	7.3
07:09:2009:19:28:06	403	4.9	9.17	13.7
07:09:2009:19:30:06	391	4.8	8.57	23.8
07:09:2009:19:32:06	217	0.0	8.39	32.7
07:09:2009:19:32:20	Drop Top Plug			
07:09:2009:19:32:20	220	0.0	8.35	32.7
07:09:2009:19:32:38	Start Displacement			
07:09:2009:19:32:38	227	0.2	8.12	32.8
07:09:2009:19:34:06	532	6.2	8.30	40.5
07:09:2009:19:36:06	648	5.9	8.29	12.1
07:09:2009:19:38:06	774	5.9	8.29	24.0
07:09:2009:19:40:07	878	5.9	8.28	36.0
07:09:2009:19:42:07	995	5.9	8.28	47.8
07:09:2009:19:44:07	1112	5.7	8.29	59.6
07:09:2009:19:46:07	1240	5.7	8.29	71.0
07:09:2009:19:48:07	1321	5.7	8.28	82.5
07:09:2009:19:50:07	1374	4.7	8.28	92.9
07:09:2009:19:52:08	1463	4.7	8.28	102.4
07:09:2009:19:54:08	1450	3.1	8.28	109.6
07:09:2009:19:56:08	1485	3.1	8.28	115.8
07:09:2009:19:57:18	Bump Top Plug			
07:09:2009:19:57:18	2010	0.0	8.28	117.1
07:09:2009:19:57:20	End Displacement			
07:09:2009:19:57:20	2043	0.0	8.28	117.1
07:09:2009:19:58:08	1142	0.0	8.28	122.5

Time mm:dd:yyyy:hh:mm:ss	Treating Pressure psi	Flow Rate bbl/min	Density lb/gal	Volume bbl
07:09:2009:19:59:33	End Job			
07:09:2009:19:59:33	221	0.0	8.28	122.5

Well	AID STATE , 2	Client	NADEL GUSSMAN HEYCO
Field		SIR No.	B468-00026
Engineer	Anthony Granados	Job Type	5 1/2 CASING
Country	United States	Job Date	07-09-2009



Nadel and Gussman - Aid St 2 Field Blend Lead

Fluid No : 2009 9C219003	Client : Nadel & Gussman/Heyco	Location / Rig : Eddy, NM	Signatures
Date : Jul-05-2009	Well Name : Aid State 2	Field :	A. Galindo

Job Type	Production	Depth	5200.0 ft	TVD	5200.0 ft
BHST	122 degF	BHCT	110 degF	BHP	3020 (psi)
Starting Temp.	80 degF	Time to Temp.	00:29 hr:mn	Heating Rate	1.01 degF/min
Starting Pressure	410 psi	Time to Pressure	00:29 hr:mn	Schedule	9.5-1

Composition

Slurry Density	12.40 lb/gal	Yield	2.17 ft ³ /sk	Mix Fluid	12.370 gal/sk
Solid Vol. Fraction	23.6 %	Porosity	76.4 %	Slurry type	Conventional

Blend 35/65 C

Code	Mass Per Sack
D903	61 lb
D132	28 lb

Code	Concentration	Sack/Reference	Component	Blend Density	Lb/Number
35/65 C		89 lb of BLEND	Blend	186.60 lb/ft ³	
Fresh water	12.187 gal/sk		Base Fluid		
D044	5.000 %BWOW		Salt		
D020	6.000 %BWOB		Extender		
D046	0.200 %BWOB		Antifoam		
D130	0.125 lb/sk		Lost circ		

Rheology (Average readings)

(rpm)	(deg)	(cp)
300	20.0	23.0
200	17.5	20.5
100	13.5	17.0
60	11.5	15.5
30	10.5	14.5
6	9.5	11.5
3	8.5	9.5

10 sec Gel	10	9
10 min Gel	18	10
1 min Stirring	20	23

Temperature	80 degF	110 degF
-------------	---------	----------

Pv: 11.019 cP	Pv: 9.623 cP
Ty: 9.51 lbf/100ft ²	Ty: 13.68 lbf/100ft ²

Thickening Time

Consistency	Time
POD :	03:25 hr:mn
30 Bc	04:21 hr:mn
50 Bc	05:29 hr:mn
70 Bc	07:19 hr:mn

Free Fluid

6.0 mL/250mL	in 2 hrs
At 110 degF and 0 deg incl.	
Sedimentation	None

UCA Compressive Strength

Time	PSI
03:12 hr:mn	50 psi
18:10 hr:mn	500 psi

Nadel and Gussman - Aid St 2 Field Blend Tail

Fluid No : 2009 9C219004	Client : Nadel & Gussman/Heyco	Location / Rig : Eddy, NM	Signatures
Date : Jul-05-2009	Well Name : Aid State 2	Field :	A. Galindo

Job Type	Production	Depth	5200.0 ft	TVD	5200.0 ft
BHST	122 degF	BHCT	110 degF	BHP	3020 (psi)
Starting Temp.	80 degF	Time to Temp.	00:29 hr:mn	Heating Rate	1.01 degF/min
Starting Pressure	410 psi	Time to Pressure	00:29 hr:mn	Schedule	9.5-1

Composition

Slurry Density	13.00 lb/gal	Yield	1.41 ft ³ /sk	Mix Fluid	7.071 gal/sk
Solid Vol. Fraction	32.9 %	Porosity	67.1 %	Slurry type	Conventional

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
PVL		75 lb of BLEND	Blend	176.05 lb/ft ³	
Fresh water	7.045 gal/sk		Base Fluid		
D044	1.300 %BWOW		Salt		
D167	0.200 %BWOC		Fluid loss		
D065	0.200 %BWOC		Dispersant		
D046	0.200 %BWOC		Antifoam		
D130	2.000 lb/sk		Lost circ		
D013	0.200 %BWOC		Retarder		

Rheology (Average readings)

(rpm)	(deg)	(deg)
300	21.0	50.0
200	16.5	43.0
100	13.5	36.0
60	10.0	32.0
30	9.0	26.0
6	5.0	18.0
3	4.0	16.0
10 sec Gel	4	16
10 min Gel	28	20
1 min Stirring	22	52
Temperature	80 degF	110 degF
	Pv: 13.345 cP	Pv: 22.085 cP
	Ty: 7.89 lbf/100ft ²	Ty: 28.13 lbf/100ft ²

Thickening Time

Consistency	Time
POD :	03:23 hr:mn
30 Bc	04:08 hr:mn
50 Bc	04:08 hr:mn
70 Bc	04:18 hr:mn

Free Fluid

0.0 mL/250mL	in 2 hrs
At 110 degF and 0 deg incl.	
Sedimentation	None

UCA Compressive Strength

Time	CS
06:35 hr:mn	50 psi
09:48 hr:mn	500 psi