

15-055-21673-00-00  
**Cementing Service Report**

**Schlumberger**

<b>Dowell</b>		<b>Customer</b>		<b>Job Number</b>	
		HELMERICH & PAYNE INC		20151505	
<b>Well</b>	<b>Location (legal)</b>	<b>Dowell Location</b>		<b>Job Start</b>	
Norma 2-22	Sec. 22-25S-34W	Ulysses, KS		03/29/2000	
<b>Field</b>	<b>Formation Name/Type</b>	<b>Deviation</b>	<b>Bit Size</b>	<b>Well MD</b>	<b>Well TVD</b>
Hugoton	Plug to Abandon	0	0 in	5,500 ft	5,500 ft
<b>County</b>	<b>State/Province</b>	<b>BHP</b>	<b>BHST</b>	<b>BHCT</b>	<b>Pore Press. Gradient</b>
Finney	Kansas	0 psi	125 °F	110 °F	0 psi/ft
<b>Rig Name</b>	<b>Drilled For</b>	<b>Service Via</b>		<b>Casing/Liner</b>	
Cheyenne Drilling 3	Oil & Gas	Land		<b>Depth, ft</b>	<b>Size, in</b>
<b>Offshore Zone</b>	<b>Well Class</b>	<b>Well Type</b>	<b>Weight, lb/ft</b>	<b>Grade</b>	<b>Thread</b>
	New	Development	24		
<b>Drilling Fluid Type</b>	<b>Max. Density</b>	<b>Plastic Viscosity</b>	<b>Tubing/Drill Pipe</b>		
	0 lb/gal	0 cp	<b>Depth,</b>	<b>Size, in</b>	<b>Weight, lb/ft</b>
<b>Service Line</b>	<b>Job Type</b>		3100	4.5	16.6
Cementing	Plug & Abandon		0		
<b>Max. Allowed Tubing Pressure</b>	<b>Max. Allowed Ann. Pressure</b>	<b>WellHead Connection</b>	<b>Perforations/Open Hole</b>		
1000 psi	0 psi	4 1/2" XH DP pin	<b>Top, ft</b>	<b>Bottom, ft</b>	<b>spf</b>
<b>Service Instructions</b>			0	0	0
Safely deliver & perform Plug to Abandon with materials & equipment listed on the Service Receipt. Per clients instructions.			0	0	0
			0	0	0
			<b>Treat Down</b>	<b>Displacement</b>	<b>Packer Type</b>
			Drill Pipe	0 bbl	None
			<b>Tubing Vol.</b>	<b>Casing Vol.</b>	<b>Annular Vol.</b>
			0 bbl	0 bbl	0 bbl
					<b>OpenHole Vol</b>
					0 bbl
<b>Casing/Tubing Secured</b>	<b>1 Hole Volume Circulated prior to Cementing:</b>		<b>Casing Tools</b>		<b>Squeeze Job</b>
<b>Lift Pressure:</b>	psi		<b>Shoe Type:</b>	<b>Squeeze Type</b>	
<b>Pipe Rotated</b>		<b>Pipe Reciprocated:</b>	<b>Shoe Depth:</b>	<b>Tool Type:</b>	
			5500 ft		
<b>No. Centralizers:</b>	0	<b>Top Plugs:</b>	<b>Stage Tool Type</b>	<b>Tool Depth:</b>	
		0		0 ft	
<b>Cement Head Type:</b>		<b>Bottom Plugs:</b>	<b>Stage Tool Depth:</b>	<b>Tail Pipe Size:</b>	
		0	0 ft	0 in	
<b>Job Scheduled For:</b>	<b>Arrived on Location:</b>	<b>Leave Location:</b>	<b>Collar Type:</b>	<b>Tail Pipe Depth:</b>	
03/29/2000 20:00	03/29/2000 20:00	03/30/2000 3:00		0 ft	
			<b>Collar Depth:</b>	<b>Sqz Total Vol:</b>	0 bbl

Time	CumVol	Density	Pressure U1	Reset Volume	TotFlowrate	Message	
24 hr clock	bbl	ppg	psi	bbl	bpm		
23:19	0	0	0	0	0	0	START ACQUISITION
23:19	0	-6.25	-3805	0	0	0	
23:19	0	-6.25	-3805	0	0	0	Start Pumping Water
23:19	1.39	8.36	348	1.39	3.91	0	
23:20	3.36	8.31	361.7	3.36	3.91	0	
23:20	5.33	8.24	352.6	5.33	3.91	0	
23:21	7.3	8.23	348	7.3	3.91	0	
23:21	9.27	8.23	348	9.27	3.91	0	
23:21	9.27	8.23	348	9.27	3.91	0	[Reset Volume]=0 bbl
23:22	9.27	8.23	348	9.27	3.91	0	Start Cement Slurry
23:22	11.24	14.2	375.5	1.44	3.91	0	
23:22	13.21	13.29	352.6	3.41	3.91	0	
23:23	15.18	13.52	334.2	5.38	3.91	0	
23:23	17.15	13.64	293	7.35	3.91	0	
23:24	19.12	13.26	256.4	9.32	3.91	0	
23:24	21.09	13.76	233.5	11.3	3.91	0	
23:25	23.06	13.49	192.3	13.26	3.91	0	
23:25	25.03	13.89	155.7	15.23	3.89	0	
23:26	27	12.97	132.8	17.2	3.91	0	
23:26	28.97	13.87	128.2	19.17	3.91	0	
23:27	30.94	13.46	119	21.14	3.91	0	
23:27	32.91	13.52	119	23.11	3.89	0	

**RECEIVED**  
 STATE CORPORATION COMMISSION  
**MAY 15 2000**  
 CONSERVATION DIVISION  
 Wichita, Kansas

Well	Norma #2-22		Field			Hugoton	Service Date	Customer	Job Number
Time	CumVol	Density	Pressure U1	Reset Volume	TotFlowrate			Message	
24 hr clock	bbl	ppg	psi	bbl	bpm				
23:28	34.87	13.52	114.5	25.08	3.91	0	0		
23:28	34.87	13.52	114.5	25.08	3.91	0	0	[Reset Volume]=0 bbl	
23:28	36.84	13.49	114.5	0	3.91	0	0		
23:29	36.64	13.49	114.5	0	3.91	0	0	Start Pumping Water	
23:29	38.81	10.84	73.26	1.97	3.89	0	0		
23:29	38.81	10.84	73.26	1.97	3.89	0	0	[Reset Volume]=0 bbl	
23:29	40.81	9.74	64.1	0.181	3.89	0	0		
23:30	40.81	9.74	64.1	0.181	3.89	0	0	Start Pumping Mud	
23:30	42.77	9.69	160.3	2.15	3.91	0	0		
23:30	44.74	9.62	146.5	4.12	3.91	0	0		
23:31	46.89	9.61	164.8	6.26	4.98	0	0		
23:31	49.65	9.61	192.3	9.03	5.7	0	0		
23:32	52.53	9.58	183.2	11.9	5.7	0	0		
23:32	55.46	9.56	178.6	14.84	5.7	0	0		
23:33	58.33	9.56	187.7	17.71	5.7	0	0		
23:33	61	9.62	169.4	20.37	5.09	0	0		
23:34	63.57	9.62	183.2	22.95	5.37	0	0		
23:34	66.27	9.62	183.2	25.64	5.34	0	0		
23:35	68.97	9.62	169.4	28.34	5.37	0	0		
23:35	71.65	9.62	256.4	31.03	5.34	0	0		
23:36	71.65	9.62	256.4	31.03	5.34	0	0	STOP ACQUISITION	
0:23	71.65	9.62	256.4	31.03	5.34	0	0	START ACQUISITION	
0:23	72.92	-6.25	-3805	32.29	0	0	0		
0:23	72.92	-6.25	-3805	32.29	0	0	0	[Reset Volume]=0 bbl	
0:24	72.92	-6.25	-3805	32.29	0	0	0	Start Pumping Water	
0:24	73.46	9.62	18.32	0.538	3.94	0	0		
0:24	75.42	9.62	68.68	2.5	3.91	0	0		
0:25	77.39	9.55	114.5	4.47	3.91	0	0		
0:25	79.35	9.49	141.9	6.43	3.91	0	0		
0:26	81.32	9.46	160.3	8.4	3.91	0	0		
0:26	81.32	9.46	160.3	8.4	3.91	0	0	[Reset Volume]=0 bbl	
0:26	83.29	9.75	201.5	0.262	3.89	0	0		
0:26	81.32	9.46	160.3	8.4	3.91	0	0	Start Cement Slurry	
0:27	85.25	14.26	288.5	2.23	3.89	0	0		
0:27	87.22	13.37	242.7	4.19	3.91	0	0		
0:28	89.18	13.34	164.8	6.16	3.91	0	0		
0:28	91.15	13.35	146.5	8.12	3.91	0	0		
0:29	93.11	13.52	114.5	10.09	3.91	0	0		
0:29	95.08	13.13	87	12.06	3.91	0	0		
0:30	95.08	13.13	87	12.06	3.91	0	0	[Reset Volume]=0 bbl	
0:30	95.08	13.13	87	12.06	3.91	0	0	Start Pumping Water	
0:30	97.05	9.68	68.68	0.722	3.91	0	0		
0:30	99.01	8.84	68.68	2.69	3.89	0	0		
0:30	99.01	8.84	68.68	2.69	3.89	0	0	[Reset Volume]=0 bbl	
0:30	99.01	8.84	68.68	2.69	3.89	0	0	Start Pumping Mud	
0:31	101	8.64	160.3	1.37	3.91	0	0		
0:31	102.9	8.63	164.8	3.34	3.91	0	0		
0:32	104.9	8.61	164.8	5.31	3.91	0	0		
0:32	106.4	8.65	105.3	6.75	0.811	0	0		
0:33	106.8	8.63	87	7.15	0.811	0	0		
0:33	107	8.73	36.63	7.38	1.51	0	0		
0:34	108.6	8.73	77.84	8.96	3.94	0	0		
0:34	111.4	8.7	187.7	11.75	5.73	0	0		
0:35	114.3	8.64	219.8	14.69	5.73	0	0		

RECEIVED  
STATE CORPORATION COMMISSION

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CONSERVATION DIVISION  
Wichita, Kansas

Well	Field	Service Date	Customer	Job Number			
Norma #2-22	Hugoton		HELMERICH & PAYNE INC	20151505			
Time	CumVol	Density	Pressure U1	Reset Volume	TotFlowrate	Message	
24 hr clock	bbl	ppg	psi	bbl	bpm		
0:35	117.2	8.55	251.8	17.56	5.7	0	0
0:36	118	8.64	27.47	18.36	0	0	0
0:36	118	8.64	27.47	18.36	0	0	0 STOP ACQUISITION
1:16	118	8.64	27.47	18.36	0	0	0 START ACQUISITION
1:16	118	-6.25	-3805	18.36	0	0	0
1:16	118	-6.25	-3805	18.36	0	0	0 [Reset Volume]=0 bbl
1:16	118	-6.25	-3805	18.36	0	0	0 Start Pumping Water
1:16	119.2	8.64	82.42	1.26	3.91	0	0
1:17	121.2	8.64	77.84	3.22	3.91	0	0
1:17	123.2	11.41	96.15	5.19	3.91	0	0
1:18	125.1	12.57	123.6	7.16	3.89	0	0
1:18	127.1	13	119	9.12	3.91	0	0
1:19	127.1	13	119	9.12	3.91	0	0 [Reset Volume]=0 bbl
1:19	127.1	13	119	9.12	3.91	0	0 Start Cement Slurry
1:19	129.1	12.55	201.5	0.655	3.91	0	0
1:19	131	13.64	169.4	2.62	3.91	0	0
1:20	133	13.4	100.7	4.59	3.89	0	0
1:20	135	13.43	73.26	6.56	3.91	0	0
1:21	136.9	13.46	73.26	8.53	3.89	0	0
1:21	136.9	13.46	73.26	8.53	3.89	0	0 [Reset Volume]=0 bbl
1:21	138.9	11	64.1	0.262	3.91	0	0
1:22	140.9	9.61	54.95	2.23	3.91	0	0
1:22	142.8	9.16	50.37	4.19	3.91	0	0
1:23	144.8	9.09	36.63	6.16	3.91	0	0
1:23	146.8	8.95	32.05	8.12	3.91	0	0
1:23	146.8	8.95	32.05	8.12	3.91	0	0 STOP ACQUISITION
2:01	146.8	8.95	32.05	8.12	3.91	0	0 START ACQUISITION
2:02	146.9	-6.25	-3805	8.28	0	0	0
2:02	146.9	-6.25	-3805	8.28	0	0	0 [Reset Volume]=0 bbl
2:02	147.2	13.49	32.05	0.327	3.36	0	0
2:02	147.2	13.49	32.05	0.327	3.36	0	0 Start Pumping Water
2:03	149.1	13.49	68.68	2.15	3.86	0	0
2:03	151	13.49	59.52	4.09	3.86	0	0
2:03	151	13.49	59.52	4.09	3.86	0	0 [Reset Volume]=0 bbl
2:03	151	13.49	59.52	4.09	3.86	0	0 Start Cement Slurry
2:04	152.9	13.45	123.6	0.906	3.86	0	0
2:04	154.9	13.33	137.4	2.85	3.86	0	0
2:05	155.5	13.46	45.79	3.43	0	0	0
2:05	155.5	12.75	54.95	3.43	0	0	0
2:06	155.5	13.77	22.89	3.43	0	0	0
2:06	155.5	13.77	0	3.43	0	0	0
2:07	155.5	13.77	0	3.43	0	0	0
2:07	155.5	13.79	0	3.43	0	0	0
2:08	156.2	12.1	64.1	4.2	2.04	0	0
2:08	157.4	13.68	50.37	5.32	2.4	0	0
2:09	158.9	13.33	54.95	6.82	3.08	0	0
2:09	159.4	13.3	0	7.36	0	0	0
2:10	159.4	13.31	0	7.36	0	0	0
2:10	159.4	13.31	-4.58	7.36	0	0	0
2:11	159.4	13.31	-4.58	7.36	0	0	0
2:11	159.4	13.31	-4.58	7.36	0	0	0
2:12	159.7	13.34	36.63	7.61	2.52	0	0
2:12	160.9	12.78	41.21	8.89	2.54	0	0
2:13	162.1	13.52	-9.16	10.08	0.028	0	0

Well	Norma #2-22		Field	Hugoton		Service Date	Customer	Job Number
Time	CumVol	Density	Pressure U1	Reset Volume	TotFlowrate	Message		
24 hr clock	bbl	ppg	psi	bbl	bpm			
2:13	162.1	13.52	-4.58	10.08	0	0	0	
2:14	162.1	13.52	0	10.08	0	0	0	
2:14	162.1	13.6	0	10.08	0	0	0	
2:15	162.1	13.61	-9.16	10.08	0	0	0	
2:15	162.1	13.61	-4.58	10.08	0	0	0	
2:16	163.2	13.22	77.84	11.18	3.66	0	0	
2:16	165.4	13.5	151.1	13.38	4.61	0	0	
2:17	167.7	12.98	132.8	15.7	4.59	0	0	
2:17	170.1	9.36	109.9	18.03	4.98	0	0	
2:18	172.9	8.65	114.5	20.9	5.7	0	0	
2:18	175.8	8.39	109.9	23.77	5.73	0	0	
2:19	178.7	8.32	105.3	26.65	5.7	0	0	

**Post Job Summary**

Average Pump Rates, bpm					Volume of Fluid Injected, bbl				
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2		
4		0	0	6	60	0	0	0	0

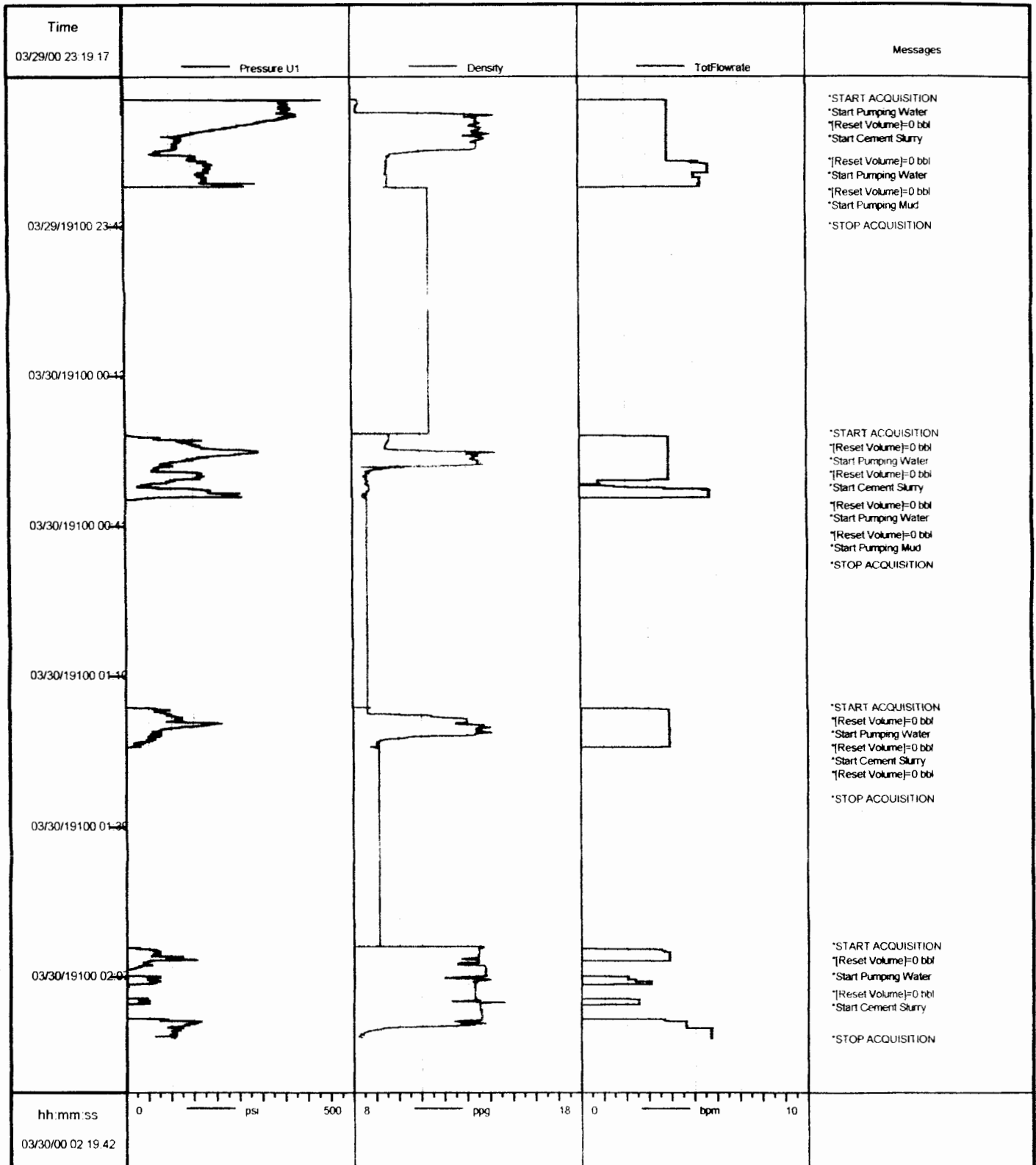
Treating Pressure Summary, psi						Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density	
400	100	200	0	0		0 bbl	0 lb/gal	
Avg. N2 Percent	Designed Slurry Volume		Displacement	Mix Water Temp	Cement Circulated to Surface?	Volume		
0 %	60 bbl		38 bbl	55 °F	Washed Thru Perfs To	0 ft		

Customer or Authorized Representative	Dowell Supervisor	CirculationLost	<input checked="" type="checkbox"/> Job Completed
Brad Klein	Dave Brawley		

Journal

Well	Norma 2-22	Client	Helmerich & Payne
Field	Hugoton	SIR No.	20151505
Country	USA	Job Date	03/29/2000 11:19:17 PM



Job: hp151505

03/30/2000 02:21:28