

Arbuckle Gelled Polymer Treatments - Economic Data

Oil production has fallen to pre-treatment levels

Gel-Tec Treated

TIORCO Treated (no color)

Polymer Services, LLC

Company	Field	Well Name	Treatment Date	Total Vol. Polymer bbls	8/8ths Estimated Cummulative Oil Produced bbls	Assumed Oil Price \$/bbl	Estimated 7/8ths Income from oil \$	Assumed Chemical Cost per bbl \$/BO	Chemical Cost of Producing Incr. oil \$	Assumed Lifting Cost per total bbl \$/bbl	Lifting Cost of Producing Incr. oil \$	Estimated Net Income from Incr. Oil \$	Estimated Cumulative Reduction in Prod. Water bbls	Assumed Water Disposal Cost \$/bbl	Estimated Savings from Reduced Water Disposal \$	Estimated Savings by Less Water \$	Approx. Savings from Reduced Water Production \$	Estimated Total Profit from Job \$	Estimated Treatment Cost per bbl polymer pumped \$/bbl	Estimated Job Cost Rig, Acid, & Polymer \$	Approx. Net profit \$	Approximate Pay-out months		
Vess Oil (MV) Data through October 2004 (except * = Feb 2005)	Bemis-Shotts	Colahan A #41	8/18-21/01	2988	1474	22.00	28,375	1.33	1,960	0.05	74	26,340	478,698	0.05	23935	23935	47,870	74,210	15.00	44,820	29,390	12		
		Rumsey A #13	8/22-26/01	4093	5454	22.00	104,990	1.33	7,254	0.05	273	97,463	164,756	0.05	8238	8238	16,476	113,939	15.00	61,395	52,544	3.5		
		Colahan A #2	8/26-30/01	4093	2477	22.00	47,682	1.33	3,294	0.05	124	44,264	494,623	0.05	24731	24731	49,462	93,726	15.00	61,395	32,331	15		
		* Hall B #4	10/21-23/02	2228.5	5357	22.00	103,122	1.33	7,125	0.05	268	95,730	162,346	0.05	8117	8117	16,235	111,964	15.00	33,428	78,537	0.70		
		* McCord A #4	11/12-13/02	543	454	22.00	8,740	1.33	604	0.05	23	8,113	55,234	0.05	2762	2762	5,523	13,636	15.00	8,145	5,491	1.8		
		Hall B #27	11/19-23/02	4007	851	22.00	16,382	1.33	1,132	0.05	43	15,207	640,482	0.05	32024	32024	64,048	79,256	15.00	60,105	19,151	7.2		
		* Colahan A #8	12/7-8/02	1492	3817	22.00	73,477	1.33	5,077	0.05	191	68,210	159,685	0.05	7984	7984	15,969	84,178	15.00	22,380	61,798	1.4		
		Colahan A #30	12/11-14/02	2749	1752	22.00	33,726	1.33	2,330	0.05	88	31,308	97,390	0.05	4870	4870	9,739	41,047	15.00	41,235	-188	Did Not		
		* J. Johansen #8	12/19-21/02	2979	6495	22.00	125,029	1.33	8,638	0.05	325	116,066	335,623	0.05	16781	16781	33,562	149,628	15.00	44,685	104,943	1.3		
		Colahan A #23	5/8-12/03	3947	894	22.00	17,210	1.33	1,189	0.05	45	15,976	965,973	0.05	48299	48299	96,597	112,573	15.00	59,205	53,368	7		
Murfin (MV) new well, watered out → Data through October 2004 (except * = Feb 2005)	Bemis-Shotts	Jorgensen #4	8/6-9/01	3805	7738	22.00	148,957	1.33	10,292	0.05	387	138,278	563,028	0.05	28151	28151	56,303	194,581	15.00	57,075	137,506	5.0		
		Peavey A-6	8/10-13/01	3806	5728	22.00	110,264	1.33	7,618	0.05	286	102,359	709,626	0.05	35481	35481	70,963	173,322	15.00	57,090	116,232	7.6		
		Hadley BC #10	8/14-18/01	3806	13038	22.00	250,982	1.33	17,341	0.05	652	232,989	1,227,899	0.05	61395	61395	122,790	355,779	15.00	57,090	298,689	3.0		
		Hadley L #4	8/11/2002	590																				
		Jorgensen #1	10/14-18/02	3985	8371	22.00	161,142	1.33	11,133	0.05	419	149,590	462,013	0.05	23101	23101	46,201	195,791	15.00	59,775	136,016	1.3		
		* Hadley A #3	10/19-23/02	3985	12106	22.00	233,041	1.33	16,101	0.05	605	216,334	372,947	0.05	18647	18647	37,295	253,629	15.00	59,775	193,854	4.1		
		Hadley BC #3	11/6-10/02	4006	88	22.00	1,694	1.33	117	0.05	4	1,573	42,875	0.05	2144	2144	4,288	5,860	15.00	60,090	-54,230			
		Hadley BC #3 Retreat	1/23/2003	399	2953	22.00	56,845	1.33	3,927	0.05	148	52,770	201,157	0.05	10058	10058	20,116	72,886	15.00	5,985	66,901	14		
		Hadley BC #2	11/11-15/02	3984																				
		Carmichael #1	11/22-23/02	1349	157	22.00	3,022	1.33	209	0.05	8	2,806	20,973	0.05	1049	1049	2,097	4,903	15.00	20,235	-15,332			
Trapp Geneseo-Edwards	Eichman A 25	10/18-19/02	731	280	22.00	5,390	1.33	372	0.05	14	5,004	575,674	0.05	28784	28784	57,567	62,571	15.00	10,965	51,606	6.0			
	* Fuller 11-28	10/21-22/02	660	359	22.00	6,911	1.33	477	0.05	18	6,415	778,709	0.05	38935	38935	77,871	84,286	15.00	9,900	74,386	3.0			
Murfin	Bemis-Shotts	Johnson B #3A	8/2-3/01	1621	9126	22.00	175,676	1.33	12,138	0.05	456	163,082	585,639	0.05	29282	29282	58,564	221,646	15.00	24,315	197,331	0.60		
		Johnson B-6	12/4-5/01	1505	2326	22.00	44,776	1.33	3,094	0.05	116	41,566	224,430	0.05	11222	11222	22,443	64,009	15.00	22,575	41,434	2.5		
		Johnson B-13	12/6-7/01	1263	5240	22.00	100,870	1.33	6,969	0.05	262	93,639	-102,337	0.05	-5117	-5117	-10,234	83,405	15.00	18,945	64,460	1.5		
	Marcotte Star Northwest Gick	Glathart #1	12/8-9/01	1007	799	22.00	15,381	1.33	1,063	0.05	40	14,278	330,358	0.05	16518	16518	33,036	47,314	15.00	15,105	32,209	9.7		
		Sutor A #3	12/10-11/01	1266	2751	22.00	52,957	1.33	3,659	0.05	138	49,160	169,155	0.05	8458	8458	16,916	66,076	15.00	18,990	47,086	3.25		
		Conell 3-35	10/24-25/02	1290	2206	22.00	42,466	1.33	2,934	0.05	110	39,421	180,119	0.05	9006	9006	18,012	57,433	15.00	19,350	38,083	3.75		
		Honomichi #2	12/17-18/02	631.5	1036	22.00	19,943	1.33	1,378	0.05	52	18,513	348,055	0.05	17403	17403	34,806	53,319	15.00	9,473	43,846	1.4		
White Eagle Data through March 2004	Bemis-Shotts	Carmichael A-4	6/2-5/03	5100	1431	30.00	37,564	1.33	1,903	0.05	72	35,589	984,870	0.05	49244	49244	98,487	134,076	15.00	76,500	57,576	5.1		
		Carmichael A-10	7/28-31/03	4940	8450	30.00	221,813	1.33	11,239	0.05	423	210,152	115,696	0.05	5785	5785	11,570	221,721	15.00	74,100	147,621	2.1		
		Hustead 10	8/1-2/03	1100	2528	30.00	66,360	1.33	3,362	0.05	126	62,871	120,502	0.05	6025	6025	12,050	74,922	15.00	16,500	58,422	1.1		
		Carmichael A-1	8/5-7/03	3020	2733	30.00	71,741	1.33	3,635	0.05	137	67,970	99,393	0.05	4970	4970	9,939	77,909	15.00	45,300	32,609	3.5		
		Carmichael A-6	8/8-11/03	5100	1756	30.00	46,095	1.33	2,335	0.05	88	43,672	158,551	0.05	7928	7928	15,855	59,527	15.00	76,500	-16,973	> 8		
		Carmichael D-4	9/8-10/03	2680	1070	30.00	28,088	1.33	1,423	0.05	54	26,611	97,462	0.05	4873	4873	9,746	36,357	15.00	40,200	-3,843	> 7		
		Carmichael D-7	9/11-13/03	2640	1185	30.00	31,106	1.33	1,576	0.05	59	29,471	64,177	0.05	3209	3209	6,418	35,889	15.00	39,600	-3,711	> 7		
		Carmichael A-12	9/22-25/03	4640	6902	30.00	181,178	1.33	9,180	0.05	345	171,653	64,930	0.05	3247	3247	6,493	178,146	15.00	69,600	108,546	2.1		
		Carmichael A-14	9/29-10/2/03	5100	9042	30.00	237,353	1.33	12,026	0.05	452	224,875	72,313	0.05	3616	3616	7,231	232,106	15.00	76,500	155,606	1.8		
		Kollman 12	10/6-9/03	4000	3615	30.00	94,894	1.33	4,808	0.05	181	89,905	83,866	0.05	4193	4193	8,387	98,292	15.00	60,000	38,292	3.9		