

21-255-5E

COMPANY CITIES SERVICE OIL COMPANY
WELL CHESNEY-HEGBERG NO. 222

FOR THE INTERVAL 80. TO 710.

SDEP=	80.00	EDEP=	710.00	GMIN=	34.00	GMAX=	102.00
DSH =	2.65	NSH =	30.00	A =	0.62	M =	2.15
RW =	2.00	RSH =	5.00	SIRR=	40.00	BFT =	80.00
CALD=	9.00	GCUR=	2.00	DF =	1.00	DG =	2.65
NF =	100.00	LCOR=	-4.00	TF =	189.00	TM =	55.50
TSH =	100.00	CP =	1.00	SHCT=	40.00	SHDF=	0.
SSP =	22.00	PRNT=	1.00	PMAX=	30.00	SRHM=	0.50
N =	2.00	RMF =	0.05	GRAD=	1.00	SWOP=	3.00
CALM=	15.00	BITS=	7.87				

OWLL

CITIES SERVICE OIL COMPANY
 CHESNEY HECBERG UNIT MP NO. 222

DEPTH	PERM. INDEX MD	WATER SAT. %	POROSITY %	DENSITY HYDROCARBON GM/CC	CLAY %	CUM. POR. FEET	CUM. HYCARB FEET
80.0	11	100	14.5	1.0	20	.07	0.00
81.0	6	100	12.8	1.0	24	.20	0.00
82.0	4	100	11.5	1.0	32	.32	0.00
83.0	1	100	9.1	1.0	39	.42	0.00
84.0	3	100	11.0	1.0	28	.52	0.00
85.0	1	100	7.4	1.0	28	.60	0.00
86.0	0	100	3.8	1.0	35	.65	0.00
87.0	0	100	2.9	1.0	40	.68	0.00
88.0	0	100	2.4	1.0	38	.70	0.00
89.0	0	100	2.7	1.0	40	.73	0.00
90.0	0	100	1.7	1.0	48	.75	0.00
91.0	0	100	2.0	1.0	45	.77	0.00
107.0	0	100	3.1	1.0	26	.94	0.00
108.0	0	100	3.9	1.0	19	.98	0.00
109.0	0	100	3.7	1.0	22	1.02	0.00
110.0	0	100	6.3	1.0	26	1.07	0.00
111.0	1	100	7.4	1.0	35	1.14	0.00
125.0	0	100	.1	1.0	48	1.25	0.00
126.0	0	100	.1	1.0	45	1.25	0.00
127.0	0	100	.6	1.0	45	1.25	0.00
128.0	1	100	8.2	1.0	42	1.31	0.00
137.0	0	100	1.5	1.0	47	1.70	0.00
138.0	0	100	3.6	1.0	41	1.72	0.00
139.0	4	100	11.5	1.0	34	1.84	0.00
140.0	1	100	8.2	1.0	47	1.92	0.00
141.0	0	100	1.3	1.0	40	1.97	0.00
142.0	0	100	.1	1.0	34	1.97	0.00
143.0	0	100	3.3	1.0	31	2.00	0.00
144.0	0	100	4.4	1.0	42	2.05	0.00
145.0	0	100	3.9	1.0	46	2.08	0.00
146.0	1	100	9.0	1.0	28	2.16	0.00
147.0	1	100	7.8	1.0	25	2.24	0.00
148.0	0	100	5.5	1.0	26	2.30	0.00
149.0	0	100	2.6	1.0	27	2.33	0.00
150.0	0	100	.8	1.0	29	2.35	0.00
151.0	0	100	.1	1.0	42	2.35	0.00
153.0	0	100	.1	1.0	48	2.35	0.00
154.0	0	100	.1	1.0	46	2.35	0.00
161.0	3	100	10.9	1.0	39	2.47	0.00
162.0	11	100	14.4	1.0	27	2.61	0.00
163.0	18	100	16.2	1.0	22	2.77	0.00
164.0	15	100	15.5	1.0	20	2.93	0.00
165.0	11	100	14.6	1.0	18	3.07	0.00
166.0	11	100	14.6	1.0	18	3.22	0.00
167.0	10	100	14.3	1.0	17	3.36	0.00

STOCK FORM NO. 61411-20

O W L

CITIES SERVICE OIL COMPANY
CHESNEY HECBERG UNIT MP NO. 222

DEPTH	PERM. INDEX MD	WATER SAT. %	POROSITY %	DENSITY HYDROCARBON GM/CC	CLAY %	CUM. POR. FEET	CUM. HYCARB FEET
168.0	9	100	13.8	1.0	17	3.50	0.00
169.0	11	100	14.4	1.0	16	3.65	0.00
170.0	12	100	14.7	1.0	15	3.79	0.00
171.0	11	100	14.4	1.0	13	3.94	0.00
172.0	5	100	11.9	1.0	15	4.06	0.00
173.0	0	100	5.1	1.0	25	4.12	0.00
174.0	0	100	3.1	1.0	32	4.16	0.00
175.0	0	100	2.4	1.0	33	4.18	0.00
176.0	0	100	.1	1.0	27	4.19	0.00
177.0	0	100	.1	1.0	26	4.19	0.00
178.0	0	100	.6	1.0	38	4.20	0.00
179.0	0	100	.4	1.0	48	4.20	0.00
189.0	1	100	7.3	1.0	47	4.54	0.00
190.0	1	100	9.1	1.0	41	4.73	0.00
191.0	2	100	9.7	1.0	35	4.82	0.00
192.0	4	100	11.5	1.0	22	4.93	0.00
193.0	1	100	8.1	1.0	28	5.03	0.00
194.0	0	100	.1	1.0	32	5.05	0.00
195.0	0	100	.1	1.0	22	5.06	0.00
196.0	0	100	.1	1.0	21	5.06	0.00
197.0	0	100	2.0	1.0	21	5.07	0.00
198.0	0	100	2.9	1.0	23	5.10	0.00
199.0	0	100	3.1	1.0	25	5.13	0.00
200.0	0	100	2.8	1.0	32	5.16	0.00
201.0	0	100	2.9	1.0	40	5.19	0.00
206.0	0	100	.1	1.0	44	5.25	0.00
207.0	0	100	.1	1.0	35	5.25	0.00
208.0	0	100	.1	1.0	35	5.25	0.00
209.0	0	100	.1	1.0	32	5.25	0.00
210.0	0	100	.1	1.0	30	5.26	0.00
211.0	0	100	.1	1.0	27	5.26	0.00
212.0	0	100	.1	1.0	28	5.26	0.00
213.0	0	100	1.4	1.0	32	5.27	0.00
214.0	0	100	2.3	1.0	48	5.29	0.00
225.0	0	100	5.6	1.0	45	5.68	0.00
226.0	0	100	7.1	1.0	37	5.75	0.00
227.0	0	100	5.2	1.0	35	5.81	0.00
228.0	0	100	1.5	1.0	29	5.84	0.00
229.0	0	100	.2	1.0	32	5.84	0.00
230.0	0	100	.1	1.0	39	5.84	0.00
231.0	0	100	.1	1.0	43	5.84	0.00
232.0	0	100	.1	1.0	38	5.84	0.00
233.0	0	100	.1	1.0	37	5.84	0.00
234.0	0	100	1.4	1.0	41	5.85	0.00
237.0	0	100	3.3	1.0	49	5.91	0.00
238.0	0	100	5.0	1.0	44	5.96	0.00

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CITIES SERVICE OIL COMPANY
 CHESNEY HECBERG UNIT MP NO. 222

DEPTH	PERM. INDEX MD	WATER SAT. %	POROSITY %	DENSITY HYDROCARBON GM/CC	CLAY %	CUM. POR. FEET	CUM. HYCARB FEET
242.0	0	100	3.1	1.0	49	6.10	0.00
243.0	0	100	.1	1.0	48	6.11	0.00
244.0	0	100	.1	1.0	44	6.11	0.00
245.0	0	100	.1	1.0	35	6.11	0.00
246.0	0	100	.1	1.0	32	6.11	0.00
247.0	0	100	.1	1.0	36	6.11	0.00
248.0	0	100	1.2	1.0	48	6.12	0.00
263.0	0	100	.1	1.0	48	6.47	0.00
264.0	0	100	.1	1.0	40	6.47	0.00
265.0	0	100	.1	1.0	27	6.47	0.00
266.0	0	100	.1	1.0	27	6.47	0.00
267.0	0	100	.1	1.0	41	6.47	0.00
276.0	0	100	2.3	1.0	41	6.61	0.00
277.0	0	100	2.3	1.0	33	6.63	0.00
278.0	0	100	2.7	1.0	28	6.66	0.00
279.0	0	100	3.2	1.0	42	6.69	0.00
286.0	0	100	.4	1.0	46	6.79	0.00
287.0	0	100	.1	1.0	41	6.79	0.00
288.0	0	100	.1	1.0	37	6.79	0.00
289.0	0	100	.7	1.0	43	6.79	0.00
290.0	0	100	1.2	1.0	48	6.81	0.00
294.0	0	100	.9	1.0	49	6.88	0.00
295.0	0	100	.6	1.0	37	6.89	0.00
296.0	0	100	.1	1.0	28	6.89	0.00
297.0	0	100	1.8	1.0	21	6.90	0.00
298.0	0	100	3.1	1.0	22	6.93	0.00
299.0	0	100	4.7	1.0	29	6.98	0.00
300.0	0	100	4.7	1.0	40	7.02	0.00
301.0	0	100	3.4	1.0	49	7.06	0.00
309.0	0	100	1.2	1.0	44	7.11	0.00
310.0	0	100	1.7	1.0	37	7.13	0.00
311.0	0	100	1.1	1.0	35	7.14	0.00
312.0	0	100	1.1	1.0	30	7.15	0.00
313.0	0	100	2.8	1.0	25	7.17	0.00
314.0	0	100	4.7	1.0	24	7.21	0.00
315.0	0	100	6.5	1.0	26	7.28	0.00
316.0	1	100	7.3	1.0	27	7.35	0.00
317.0	0	100	5.0	1.0	28	7.41	0.00
318.0	0	100	3.7	1.0	28	7.44	0.00
319.0	0	100	2.2	1.0	32	7.47	0.00
320.0	0	100	.9	1.0	43	7.48	0.00
322.0	0	100	.1	1.0	50	7.49	0.00
323.0	0	100	.1	1.0	48	7.49	0.00

OWLL

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DEPTH	PERM. INDEX MD	WATER SAT. %	POROSITY %	DENSITY HYDROCARBON GM/CC	CLAY %	CUM. POR. FEET	CUM. HYCARB FEET
333.0	2	100	9.9	1.0	14	7.61	0.00
334.0	5	100	12.0	1.0	18	7.73	0.00
335.0	1	100	8.9	1.0	17	7.82	0.00
336.0	0	100	.1	1.0	30	7.86	0.00
337.0	0	100	.1	1.0	23	7.86	0.00
338.0	0	100	.1	1.0	30	7.86	0.00
339.0	0	100	.1	1.0	32	7.86	0.00
340.0	0	100	.1	1.0	29	7.86	0.00
341.0	0	100	.1	1.0	29	7.86	0.00
342.0	0	100	.1	1.0	27	7.86	0.00
343.0	0	100	.7	1.0	29	7.87	0.00
344.0	0	100	.6	1.0	33	7.88	0.00
345.0	0	100	.1	1.0	32	7.88	0.00
346.0	0	100	.1	1.0	34	7.88	0.00
347.0	0	100	.1	1.0	23	7.88	0.00
348.0	0	100	.1	1.0	19	7.88	0.00
349.0	0	100	.1	1.0	20	7.88	0.00
350.0	0	100	.1	1.0	24	7.88	0.00
351.0	0	100	.1	1.0	30	7.89	0.00
352.0	0	100	.1	1.0	31	7.89	0.00
353.0	0	100	.1	1.0	25	7.89	0.00
354.0	0	100	.1	1.0	27	7.89	0.00
355.0	0	100	.1	1.0	35	7.89	0.00
356.0	0	100	.4	1.0	44	7.89	0.00
364.0	5	100	12.3	1.0	35	8.13	0.00
365.0	1	100	9.0	1.0	30	8.23	0.00
366.0	1	100	8.7	1.0	28	8.32	0.00
367.0	2	100	9.3	1.0	22	8.41	0.00
368.0	2	100	10.2	1.0	20	8.51	0.00
369.0	2	100	10.4	1.0	22	8.61	0.00
370.0	0	100	1.0	1.0	28	8.64	0.00
371.0	0	100	.1	1.0	29	8.64	0.00
372.0	0	100	.1	1.0	26	8.64	0.00
373.0	0	100	.1	1.0	24	8.64	0.00
374.0	0	100	.1	1.0	33	8.64	0.00
386.0	0	100	.1	1.0	50	8.77	0.00
387.0	0	100	.1	1.0	37	8.77	0.00
388.0	0	100	.1	1.0	37	8.78	0.00
389.0	0	100	.1	1.0	37	8.78	0.00
390.0	0	100	.1	1.0	35	8.78	0.00
391.0	0	100	.8	1.0	37	8.78	0.00
392.0	0	100	1.5	1.0	46	8.80	0.00
402.0	0	100	3.0	1.0	33	9.00	0.00
403.0	2	100	9.5	1.0	23	9.08	0.00
404.0	3	100	10.7	1.0	20	9.19	0.00
405.0	1	100	7.6	1.0	28	9.28	0.00
406.0	0	100	.1	1.0	40	9.30	0.00

O W L L

CITIES SERVICE OIL COMPANY
CHESNEY HECBERG UNIT MP NO. 222

DEPTH	PERM. INDEX MD	WATER SAT. %	POROSITY %	DENSITY HYDROCARBON GM/CC	CLAY %	CUM. POR. FEET	CUM. HYCARB FEET
407.0	0	100	.1	1.0	43	9.30	0.00
408.0	0	100	1.7	1.0	21	9.31	0.00
409.0	0	100	2.1	1.0	25	9.33	0.00
410.0	0	100	1.4	1.0	31	9.34	0.00
411.0	0	100	1.7	1.0	28	9.36	0.00
412.0	0	100	2.2	1.0	28	9.38	0.00
413.0	0	100	1.7	1.0	42	9.40	0.00
417.0	0	100	.1	1.0	38	9.41	0.00
418.0	0	100	1.9	1.0	27	9.42	0.00
419.0	0	100	3.5	1.0	23	9.45	0.00
420.0	0	100	3.9	1.0	21	9.49	0.00
421.0	0	100	3.8	1.0	21	9.53	0.00
422.0	0	100	4.3	1.0	22	9.57	0.00
423.0	0	100	4.9	1.0	26	9.62	0.00
424.0	4	100	11.2	1.0	34	9.72	0.00
425.0	2	100	9.8	1.0	49	9.82	0.00
426.0	7	100	12.9	1.0	39	9.94	0.00
427.0	2	100	9.8	1.0	35	10.05	0.00
428.0	0	100	.1	1.0	44	10.07	0.00
429.0	0	100	.1	1.0	44	10.07	0.00
430.0	0	100	.1	1.0	44	10.07	0.00
431.0	0	100	.1	1.0	45	10.07	0.00
432.0	0	100	.1	1.0	43	10.07	0.00
433.0	0	100	.1	1.0	41	10.07	0.00
434.0	0	100	.4	1.0	39	10.08	0.00
435.0	0	100	1.0	1.0	37	10.08	0.00
436.0	0	100	.9	1.0	35	10.09	0.00
437.0	0	100	.1	1.0	35	10.10	0.00
438.0	0	100	.1	1.0	36	10.10	0.00
439.0	0	100	.1	1.0	36	10.10	0.00
440.0	0	100	.1	1.0	37	10.10	0.00
441.0	0	100	.1	1.0	34	10.10	0.00
442.0	0	100	.1	1.0	34	10.10	0.00
443.0	0	100	.1	1.0	39	10.10	0.00
444.0	0	100	.1	1.0	43	10.10	0.00
445.0	0	100	.1	1.0	42	10.10	0.00
446.0	0	100	.1	1.0	41	10.10	0.00
447.0	0	100	.1	1.0	42	10.11	0.00
448.0	0	100	1.3	1.0	31	10.11	0.00
449.0	0	100	7.1	1.0	26	10.16	0.00
450.0	12	100	14.9	1.0	26	10.30	0.00
451.0	20	100	16.7	1.0	27	10.46	0.00
452.0	9	100	13.9	1.0	26	10.61	0.00
453.0	1	100	8.0	1.0	29	10.71	0.00
454.0	0	100	3.7	1.0	30	10.76	0.00
455.0	0	100	2.7	1.0	32	10.78	0.00
456.0	0	100	2.2	1.0	38	10.81	0.00
457.0	0	100	1.5	1.0	43	10.82	0.00
458.0	0	100	1.5	1.0	46	10.84	0.00

O W L L

CITIES SERVICE OIL COMPANY
CHESNEY HECBERG UNIT MP NO. 222

DEPTH	PERM. INDEX MD	WATER SAT. %	POROSITY %	DENSITY HYDROCARBON GM/CC	CLAY %	CUM. POR. FEET	CUM. HYCARB FEET
459.0	0	100	2.5	1.0	38	10.86	0.00
460.0	0	100	1.4	1.0	40	10.88	0.00
461.0	0	100	.1	1.0	44	10.88	0.00
462.0	0	100	.1	1.0	45	10.88	0.00
463.0	0	100	.1	1.0	43	10.89	0.00
464.0	0	100	.1	1.0	43	10.89	0.00
465.0	0	100	.1	1.0	39	10.89	0.00
466.0	0	100	.1	1.0	36	10.89	0.00
467.0	0	100	.1	1.0	33	10.89	0.00
468.0	0	100	.1	1.0	29	10.89	0.00
469.0	0	100	.1	1.0	25	10.89	0.00
470.0	0	100	1.1	1.0	37	10.90	0.00
473.0	0	100	.6	1.0	48	10.91	0.00
474.0	0	100	1.6	1.0	37	10.93	0.00
475.0	0	100	2.3	1.0	34	10.95	0.00
476.0	0	100	.9	1.0	41	10.96	0.00
477.0	0	100	.1	1.0	44	10.96	0.00
478.0	0	100	.2	1.0	44	10.97	0.00
479.0	0	100	.1	1.0	49	10.97	0.00
480.0	0	100	.1	1.0	47	10.97	0.00
481.0	0	100	.1	1.0	40	10.97	0.00
482.0	0	100	.1	1.0	39	10.97	0.00
483.0	0	100	.1	1.0	38	10.97	0.00
484.0	0	100	.1	1.0	35	10.97	0.00
485.0	0	100	1.8	1.0	29	10.98	0.00
486.0	0	100	3.7	1.0	40	11.02	0.00
490.0	0	100	.1	1.0	49	11.04	0.00
491.0	0	100	.1	1.0	49	11.04	0.00
492.0	0	100	.1	1.0	37	11.04	0.00
493.0	0	100	1.5	1.0	26	11.05	0.00
494.0	0	100	4.3	1.0	41	11.08	0.00
499.0	0	100	2.6	1.0	45	11.15	0.00
500.0	0	100	2.5	1.0	44	11.17	0.00
501.0	0	100	1.9	1.0	38	11.19	0.00
502.0	0	100	3.8	1.0	41	11.22	0.00
503.0	0	100	4.4	1.0	48	11.26	0.00
507.0	0	100	4.3	1.0	48	11.39	0.00
508.0	0	100	5.4	1.0	45	11.44	0.00
517.0	0	100	.1	1.0	39	11.59	0.00
518.0	0	100	.1	1.0	45	11.59	0.00
587.0	0	100	.1	1.0	49	11.76	0.00
588.0	0	100	.1	1.0	45	11.76	0.00
610.0	0	100	.1	1.0	44	11.79	0.00

O.W.L.L.

STOCK FORM NO. 61411-20

CITIES SERVICE OIL COMPANY
 CHESNEY HEGBERG UNIT MP NO. 222

DEPTH	PERM. INDEX MD	WATER SAT. %	POROSITY %	DENSITY HYDROCARBON GM/CC	CLAY %	CUM. POR. FEET	CUM. HYCARB FEET
624.0	0	100	.1	1.0	45	11.80	0.00
656.0	0	100	2.7	1.0	38	11.84	0.00
657.0	1	100	7.2	1.0	21	11.90	0.00
662.0	0	100	4.0	1.0	40	12.09	0.00
663.0	0	100	7.0	1.0	29	12.15	0.00
664.0	15	100	15.5	1.0	24	12.27	0.00
665.0	89	72	23.3	1.0	23	12.48	.04
666.0	89	75	23.3	1.0	16	12.71	.10
667.0	87	81	23.2	1.0	15	12.95	.15
668.0	87	86	23.2	1.0	12	13.18	.19
669.0	104	86	24.2	1.0	8	13.42	.22
670.0	163	80	26.8	1.0	4	13.68	.27
671.0	175	81	27.2	1.0	7	13.95	.32
672.0	159	84	26.6	1.0	7	14.22	.37
673.0	125	87	25.2	1.0	16	14.48	.40
674.0	93	90	23.6	1.0	21	14.71	.43
675.0	116	83	24.8	1.0	14	14.96	.47
676.0	80	88	22.8	1.0	22	15.19	.50
677.0	64	91	21.7	1.0	20	15.41	.52
678.0	93	84	23.6	1.0	12	15.64	.55
679.0	40	100	19.4	1.0	21	15.85	.56
680.0	37	100	19.1	1.0	24	16.04	.56
681.0	25	100	17.5	1.0	32	16.22	.56
682.0	13	100	15.1	1.0	35	16.38	.56
701.0	1	100	7.6	1.0	27	16.63	.56
702.0	1	100	7.4	1.0	29	16.70	.56
703.0	0	100	6.0	1.0	36	16.76	.56
704.0	0	100	3.7	1.0	34	16.81	.56
705.0	0	100	2.6	1.0	24	16.84	.56
706.0	0	100	7.1	1.0	18	16.89	.56
707.0	1	100	7.9	1.0	44	16.97	.56

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CITIES SERVICE OIL COMPANY
 CHESNEY HEGBERG UNIT MP NO. 222

DEPTH	GR	POR	RT	RXD	SXD	RDS	SW
600.0	72.2	.1	2.6	3.7	100.0	0.0	100.0
600.5	68.7	.1	2.8	2.4	100.0	0.0	100.0
601.0	69.4	.1	3.0	1.9	100.0	0.0	100.0
601.5	78.0	.1	3.1	1.7	100.0	0.0	100.0
602.0	85.1	0.0	3.0	1.6	100.0	0.0	100.0
602.5	87.1	0.0	2.9	1.8	100.0	0.0	100.0
603.0	86.9	0.0	2.7	1.8	100.0	0.0	100.0
603.5	86.4	0.0	2.6	1.6	100.0	0.0	100.0
604.0	85.7	0.0	2.4	1.5	100.0	0.0	100.0
604.5	89.9	0.0	2.4	1.3	100.0	0.0	100.0
605.0	93.6	0.0	2.4	1.1	100.0	0.0	100.0
605.5	98.8	0.0	2.4	1.1	100.0	0.0	100.0
606.0	100.7	0.0	2.5	1.4	100.0	0.0	100.0
606.5	95.8	0.0	2.6	1.5	100.0	0.0	100.0
607.0	87.6	0.0	2.8	1.6	100.0	0.0	100.0
607.5	78.1	.1	3.1	1.8	100.0	0.0	100.0
608.0	72.0	.1	3.4	2.4	100.0	0.0	100.0
608.5	67.1	.1	3.7	3.1	100.0	0.0	100.0
609.0	61.4	.1	4.2	3.8	100.0	0.0	100.0
609.5	58.2	.1	4.5	4.0	100.0	0.0	100.0
610.0	55.6	.1	4.7	3.3	100.0	0.0	100.0
610.5	54.9	.1	4.9	3.0	100.0	0.0	100.0
611.0	60.1	.1	5.0	2.7	100.0	0.0	100.0
611.5	63.2	.1	4.9	2.8	100.0	0.0	100.0
612.0	66.0	.1	4.7	3.0	100.0	0.0	100.0
612.5	68.5	.1	4.5	3.1	100.0	0.0	100.0
613.0	70.4	.1	4.3	3.0	100.0	0.0	100.0
613.5	71.9	.1	4.0	2.3	100.0	0.0	100.0
614.0	73.4	.1	3.7	2.3	100.0	0.0	100.0
614.5	74.9	.1	3.3	2.3	100.0	0.0	100.0
615.0	76.5	.1	3.1	2.2	100.0	0.0	100.0
615.5	79.3	.1	2.9	1.9	100.0	0.0	100.0
616.0	82.5	.1	2.7	1.7	100.0	0.0	100.0
616.5	89.3	0.0	2.5	1.7	100.0	0.0	100.0
617.0	93.8	0.0	2.4	1.5	100.0	0.0	100.0
617.5	97.3	0.0	2.2	1.4	100.0	0.0	100.0
618.0	102.8	0.0	2.2	1.4	100.0	0.0	100.0
618.5	104.7	0.0	2.1	1.5	100.0	0.0	100.0
619.0	106.6	0.0	2.1	1.8	100.0	0.0	100.0
619.5	108.4	0.0	2.0	1.9	100.0	0.0	100.0
620.0	110.5	0.0	2.1	1.9	100.0	0.0	100.0
620.5	106.7	0.0	2.2	1.7	100.0	0.0	100.0
621.0	98.1	0.0	2.5	1.7	100.0	0.0	100.0
621.5	89.6	0.0	2.9	1.7	100.0	0.0	100.0
622.0	82.2	.3	3.4	2.3	100.0	0.0	100.0
622.5	76.1	.1	3.6	2.9	100.0	0.0	100.0
623.0	71.7	.1	3.7	3.7	100.0	0.0	100.0
623.5	67.1	.1	3.7	10.8	100.0	0.0	100.0
624.0	62.3	.1	3.4	20.2	100.0	0.0	100.0
624.5	58.0	.4	2.8	18.8	100.0	0.0	100.0

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CITIES SERVICE OIL COMPANY
CHESNEY HECBERG UNIT MP NO. 222

DEPTH	GR	POR	RT	RXD	SXD	RDS	SW
625.0	81.9	.3	2.6	9.4	100.0	0.0	100.0
625.5	93.7	0.0	2.3	1.8	100.0	0.0	100.0
626.0	102.6	0.0	2.0	1.2	100.0	0.0	100.0
626.5	107.4	0.0	1.8	1.2	100.0	0.0	100.0
627.0	109.5	0.0	1.7	1.3	100.0	0.0	100.0
627.5	110.1	0.0	1.5	1.2	100.0	0.0	100.0
628.0	109.1	0.0	1.4	1.3	100.0	0.0	100.0
628.5	105.1	0.0	1.4	1.3	100.0	0.0	100.0
629.0	103.2	0.0	1.3	1.2	100.0	0.0	100.0
629.5	101.2	0.0	1.2	1.1	100.0	0.0	100.0
630.0	99.6	0.0	1.2	1.0	100.0	0.0	100.0
630.5	98.0	0.0	1.2	1.0	100.0	0.0	100.0
631.0	100.0	0.0	1.2	1.0	100.0	0.0	100.0
631.5	98.8	0.0	1.2	1.0	100.0	0.0	100.0
632.0	97.6	0.0	1.2	1.0	100.0	0.0	100.0
632.5	96.4	0.0	1.2	1.1	100.0	0.0	100.0
633.0	94.9	0.0	1.3	1.2	100.0	0.0	100.0
633.5	94.2	0.0	1.3	1.2	100.0	0.0	100.0
634.0	93.5	0.0	1.4	1.1	100.0	0.0	100.0
634.5	91.2	0.0	1.4	1.1	100.0	0.0	100.0
635.0	88.9	0.0	1.5	1.0	100.0	0.0	100.0
635.5	87.0	0.0	1.6	1.0	100.0	0.0	100.0
636.0	86.0	0.0	1.7	1.1	100.0	0.0	100.0
636.5	79.3	.1	1.8	1.2	100.0	0.0	100.0
637.0	74.0	.1	1.9	1.4	100.0	0.0	100.0
637.5	70.5	.1	2.0	1.5	100.0	0.0	100.0
638.0	68.1	.1	2.0	1.7	100.0	0.0	100.0
638.5	66.5	.1	2.1	1.7	100.0	0.0	100.0
639.0	65.8	.1	2.1	1.3	100.0	0.0	100.0
639.5	68.1	.1	2.2	1.2	100.0	0.0	100.0
640.0	71.5	.1	2.3	1.1	100.0	0.0	100.0
640.5	73.7	.1	2.5	1.3	100.0	0.0	100.0
641.0	73.8	.1	2.3	1.1	100.0	0.0	100.0
641.5	72.7	.1	2.5	1.3	100.0	0.0	100.0
642.0	70.9	.1	2.7	1.4	100.0	0.0	100.0
642.5	67.1	.1	2.9	1.9	100.0	0.0	100.0
643.0	62.5	.1	3.1	2.8	100.0	0.0	100.0
643.5	61.5	.1	3.3	4.4	100.0	0.0	100.0
644.0	68.9	.2	3.5	6.2	100.0	0.0	100.0
644.5	82.6	.1	3.5	3.3	100.0	0.0	100.0
645.0	90.1	0.0	3.5	3.2	100.0	0.0	100.0
645.5	92.1	0.0	3.4	2.0	100.0	0.0	100.0
646.0	96.2	0.0	3.2	1.7	100.0	0.0	100.0
646.5	97.2	0.0	2.9	1.6	100.0	0.0	100.0
647.0	98.0	0.0	2.8	1.5	100.0	0.0	100.0
647.5	97.2	0.0	2.6	1.5	100.0	0.0	100.0
648.0	96.3	0.0	2.5	1.5	100.0	0.0	100.0
648.5	97.2	0.0	2.4	1.5	100.0	0.0	100.0
649.0	98.4	0.0	2.3	1.4	100.0	0.0	100.0
649.5	102.2	0.0	2.1	1.4	100.0	0.0	100.0

OWLL

CITIES SERVICE OIL COMPANY
 CHESNEY HEGBERG UNIT MP NO. 222

DEPTH	GR	POR	RT	RXD	SXD	RDS	SW
650.0	104.8	0.0	2.0	1.4	100.0	0.0	100.0
650.5	106.0	0.0	1.9	1.3	100.0	0.0	100.0
651.0	109.9	0.0	1.9	1.3	100.0	0.0	100.0
651.5	113.0	0.0	1.8	1.2	100.0	0.0	100.0
652.0	117.8	0.0	1.7	1.2	100.0	0.0	100.0
652.5	120.5	0.0	1.7	1.2	100.0	0.0	100.0
653.0	123.7	0.0	1.7	1.2	100.0	0.0	100.0
653.5	125.1	0.0	1.7	1.4	100.0	0.0	100.0
654.0	118.4	0.0	1.9	1.5	100.0	0.0	100.0
654.5	107.2	0.0	2.1	1.7	100.0	0.0	100.0
655.0	100.0	.6	2.3	1.8	100.0	0.0	100.0
655.5	87.8	2.7	2.4	2.2	100.0	0.0	100.0
656.0	76.2	2.7	2.6	3.0	100.0	0.0	100.0
656.5	68.6	4.5	2.6	3.8	100.0	0.0	100.0
657.0	65.0	7.2	2.7	4.4	100.0	0.0	100.0
657.5	73.0	8.1	2.7	3.8	100.0	0.0	100.0
658.0	88.2	4.8	2.5	2.6	100.0	0.0	100.0
658.5	91.7	3.9	2.4	1.7	100.0	0.0	100.0
659.0	95.0	2.7	2.3	1.4	100.0	0.0	100.0
659.5	95.5	2.3	2.2	1.4	100.0	0.0	100.0
660.0	94.0	2.5	2.1	1.4	100.0	0.0	100.0
660.5	91.6	2.7	2.2	1.5	100.0	0.0	100.0
661.0	86.3	3.3	2.4	1.6	100.0	0.0	100.0
661.5	80.8	3.6	2.6	1.8	100.0	0.0	100.0
662.0	75.4	4.0	2.8	2.2	100.0	0.0	100.0
662.5	70.1	5.2	3.0	2.5	100.0	0.0	100.0
663.0	68.3	7.0	3.1	3.0	100.0	0.0	100.0
663.5	65.9	8.4	3.1	3.4	100.0	0.0	100.0
664.0	64.4	15.5	3.1	3.6	100.0	0.0	100.0
664.5	65.3	19.0	3.0	2.3	88.1	11.9	88.1
665.0	68.0	23.3	2.9	1.9	72.4	27.6	72.4
665.5	65.9	23.4	2.7	1.6	73.5	26.5	73.5
666.0	63.0	23.3	2.6	1.4	75.3	24.7	75.3
666.5	60.5	23.2	2.5	1.3	77.8	22.2	77.8
667.0	58.2	23.2	2.3	1.3	80.7	19.3	80.7
667.5	56.7	23.2	2.2	1.4	83.8	16.2	83.8
668.0	56.7	23.2	2.0	1.4	85.9	14.1	85.9
668.5	55.8	23.3	2.0	1.4	87.5	12.5	87.5
669.0	54.6	24.2	1.9	1.6	86.1	13.9	86.1
669.5	53.7	25.5	1.8	1.5	82.9	17.1	82.9
670.0	53.3	26.8	1.7	1.2	80.2	19.8	80.2
670.5	58.5	27.3	1.7	1.3	79.9	20.1	79.9
671.0	63.1	27.2	1.6	1.4	81.3	18.7	81.3
671.5	65.5	27.0	1.6	1.4	82.2	17.8	82.2
672.0	66.0	26.6	1.6	1.4	83.7	16.3	83.7
672.5	66.3	26.2	1.7	1.4	84.0	16.0	84.0
673.0	66.3	25.2	1.7	1.4	86.6	13.4	86.6
673.5	66.3	24.3	1.7	1.5	88.6	11.4	88.6
674.0	66.8	23.6	1.8	1.6	89.9	10.1	89.9
674.5	67.4	24.3	1.9	1.8	85.6	14.4	85.6

OWLL

STOCK FORM NO. 61411-20

CITIES SERVICE OIL COMPANY
CHESNEY HEGBERG UNIT MP NO. 222

DEPTH	GR	POR	RT	RXO	SXO	RDS	SW
675.0	69.3	24.8	1.9	2.0	82.6	17.4	82.6
675.5	71.3	24.0	2.0	1.6	84.3	15.7	84.3
676.0	73.2	22.8	2.0	1.6	88.4	11.6	88.4
676.5	74.5	21.9	2.1	1.9	90.6	9.4	90.6
677.0	74.7	21.7	2.1	2.2	91.1	8.9	91.1
677.5	73.3	22.6	2.1	2.2	87.4	12.6	87.4
678.0	70.6	23.6	2.1	1.9	83.9	16.1	83.9
678.5	73.5	21.5	2.1	1.7	92.8	7.2	92.8
679.0	76.7	19.4	2.1	1.7	100.0	0.0	100.0
679.5	77.8	19.0	2.1	1.7	100.0	0.0	100.0
680.0	77.8	19.1	2.1	1.7	100.0	0.0	100.0
680.5	76.1	20.0	2.1	1.5	100.0	0.0	100.0
681.0	80.0	17.5	2.1	1.6	100.0	0.0	100.0
681.5	83.1	15.5	2.1	1.7	100.0	0.0	100.0
682.0	83.9	15.1	2.1	1.7	100.0	0.0	100.0
682.5	83.6	14.2	2.1	1.5	100.0	0.0	100.0
683.0	86.7	10.5	2.1	1.6	100.0	0.0	100.0
683.5	92.4	5.5	2.1	1.6	100.0	0.0	100.0
684.0	97.8	2.4	2.1	1.6	100.0	0.0	100.0
684.5	100.5	.9	2.1	1.4	100.0	0.0	100.0
685.0	100.8	.7	2.1	1.4	100.0	0.0	100.0
685.5	102.0	0.0	2.1	1.5	100.0	0.0	100.0
686.0	104.7	0.0	2.1	1.5	100.0	0.0	100.0
686.5	105.9	0.0	2.1	1.4	100.0	0.0	100.0
687.0	106.7	0.0	2.1	1.3	100.0	0.0	100.0
687.5	106.2	0.0	2.1	1.3	100.0	0.0	100.0
688.0	106.1	0.0	2.1	1.3	100.0	0.0	100.0
688.5	105.9	0.0	2.1	1.3	100.0	0.0	100.0
689.0	105.6	0.0	2.2	1.4	100.0	0.0	100.0
689.5	105.0	0.0	2.2	1.4	100.0	0.0	100.0
690.0	104.4	0.0	2.2	1.5	100.0	0.0	100.0
690.5	104.1	0.0	2.2	1.5	100.0	0.0	100.0
691.0	103.8	0.0	2.2	1.5	100.0	0.0	100.0
691.5	104.0	0.0	2.1	1.5	100.0	0.0	100.0
692.0	105.0	0.0	2.1	1.5	100.0	0.0	100.0
692.5	104.2	0.0	2.1	1.6	100.0	0.0	100.0
693.0	104.0	0.0	2.1	1.6	100.0	0.0	100.0
693.5	104.0	0.0	2.1	1.5	100.0	0.0	100.0
694.0	104.7	0.0	2.0	1.4	100.0	0.0	100.0
694.5	104.8	0.0	2.0	1.5	100.0	0.0	100.0
695.0	104.5	0.0	2.0	1.5	100.0	0.0	100.0
695.5	104.5	0.0	2.0	1.6	100.0	0.0	100.0
696.0	104.5	0.0	2.0	1.7	100.0	0.0	100.0
696.5	106.0	0.0	2.0	1.6	100.0	0.0	100.0
697.0	108.7	0.0	2.0	1.6	100.0	0.0	100.0
697.5	108.7	0.0	2.0	1.6	100.0	0.0	100.0
698.0	111.6	0.0	2.1	1.6	100.0	0.0	100.0
698.5	115.1	0.0	2.1	1.6	100.0	0.0	100.0
699.0	116.2	0.0	2.1	1.6	100.0	0.0	100.0
699.5	117.6	0.0	2.1	1.6	100.0	0.0	100.0

OWLL

CITIES SERVICE OIL COMPANY
CHESNEY HEGBERG UNIT MP NO. 222

DEPTH	GR	POR	RT	RXO	SXO	ROS	SW
700.0	116.8	0.0	2.1	1.6	100.0	0.0	100.0
700.5	68.1	7.7	2.0	1.7	100.0	0.0	100.0
701.0	66.5	7.6	2.1	1.7	100.0	0.0	100.0
701.5	65.8	7.5	2.1	1.3	100.0	0.0	100.0
702.0	68.1	7.4	2.2	1.2	100.0	0.0	100.0
702.5	71.5	7.0	2.3	1.1	100.0	0.0	100.0
703.0	73.7	6.0	2.5	1.3	100.0	0.0	100.0
703.5	73.8	5.3	2.3	1.1	100.0	0.0	100.0
704.0	72.7	3.7	2.5	1.3	100.0	0.0	100.0
704.5	70.9	2.5	2.7	1.4	100.0	0.0	100.0
705.0	67.1	2.6	2.9	1.9	100.0	0.0	100.0
705.5	62.5	3.7	3.1	2.8	100.0	0.0	100.0
706.0	61.5	7.1	3.3	4.4	100.0	0.0	100.0
706.5	68.9	9.0	3.5	6.2	100.0	0.0	100.0
707.0	82.6	7.9	3.5	3.3	100.0	0.0	100.0
707.5	90.1	5.9	3.5	3.2	100.0	0.0	100.0
708.0	92.1	4.6	3.4	2.0	100.0	0.0	100.0
708.5	96.2	3.1	3.2	1.7	100.0	0.0	100.0
709.0	97.2	2.6	2.9	1.6	100.0	0.0	100.0
709.5	98.0	2.1	2.8	1.5	100.0	0.0	100.0
710.0	1.5	18.6	9.0	8.1	97.2	104.7	100.0

STOCK #BEM NO. 81411-20

O.W.L.L