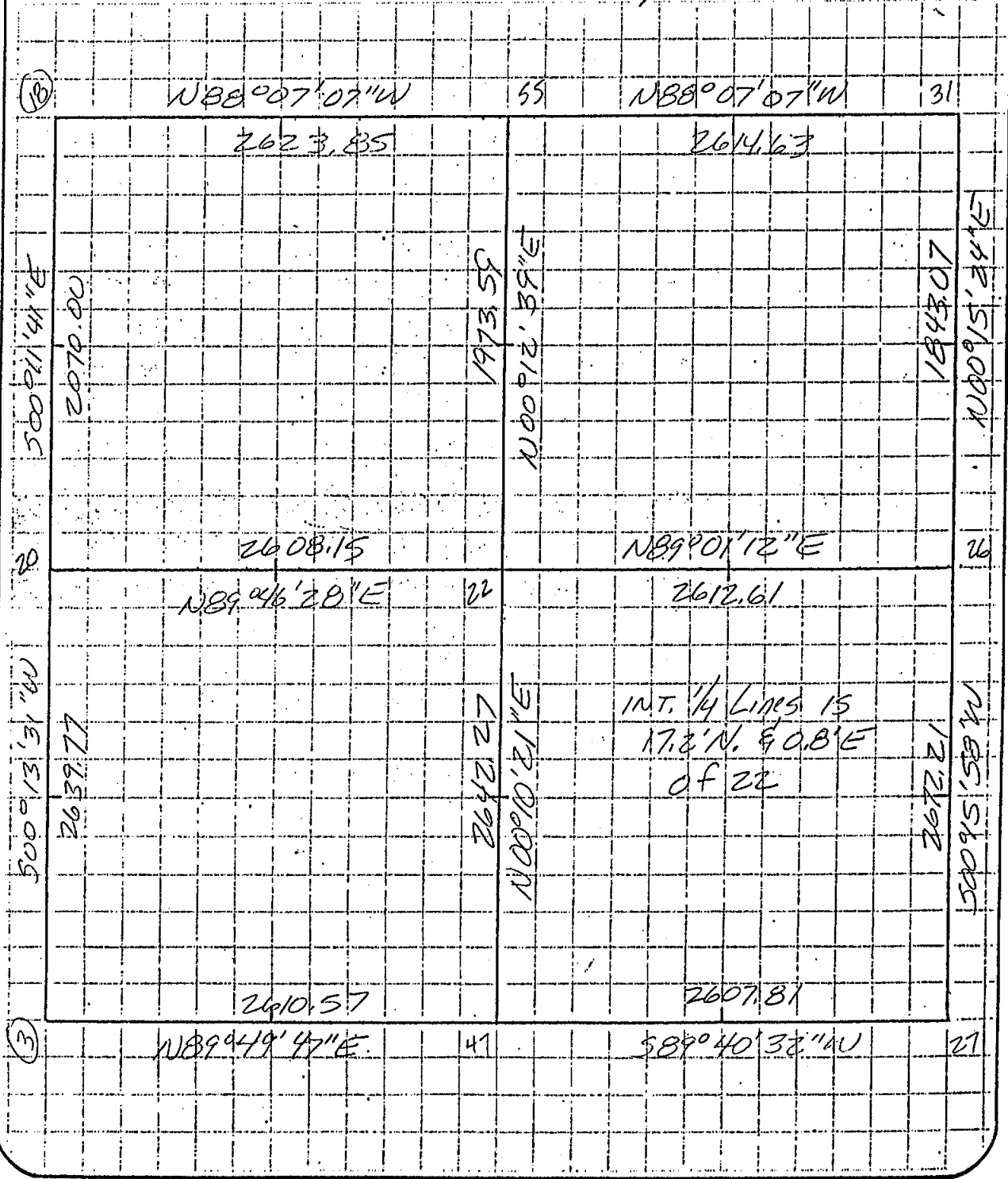




CALCULATION SHEET

REV.

CLIENT/OWNER <i>Ingham County</i>		FILING CODE	
CALC. BY/DATE (SIGNATURE)		JOB NO.	
CHECKED BY/DATE (SIGNATURE)		SUBJECT <i>Sec 1.</i>	SHEET OF
		<i>Stock bridge</i>	BOOK NO.



Job: SEC 1 STOCKBRIDGE T1N R2E  
 SEC 36 WHITE OAK T2N R2E  
 INGHAM CO MI  
 BK ST1, W01

By: DLC 8 AUG 1998

710.10  
 18  
 -----  
 692.10

91-18-42

Point	Direction	Distance	Northing	Easting	Elevation
-------	-----------	----------	----------	---------	-----------

Start					
22			66236.12280	81696.81053	
TR S	89°46'28.0" W	423.800			
41			66234.45446	81273.01382	
IN S	89°46'28.0" W	2184.351			
20			66225.85553	79088.67970	
IN N	89°46'28.0" E	2184.351			
41			66234.45446	81273.01382	
TR S	8°53'16.5" E	2691.600			
42			63575.17390	81688.87129	
IN N	44°27'08.7" W	3713.280			
1			66225.83330	79088.39960	
IN N	0°11'30.7" W	2070.130			
2			68295.95170	79081.46780	
IN S	0°02'18.9" W	4709.850			
3			63586.10260	79078.29550	
IN S	89°45'36.5" E	2610.599			
42			63575.17390	81688.87129	
IN N	89°15'54.0" E	2607.972			
27			63608.62824	84296.62907	
88 S	89°45'09.6" W	2607.716			
105			63597.37179	81688.93752	
88 S	0°10'15.4" W	22.198			
42			63575.17390	81688.87129	
IN N	0°10'15.4" E	22.198			
105			63597.37179	81688.93752	
IN N	0°10'15.4" E	2638.763			
22			66236.12280	81696.81053	

Start					
36			72683.66574	84158.41978	
IN N	3°04'35.5" W	773.600			
37			73456.15079	84116.90087	
TR N	89°50'41.5" W	422.090			
43			73457.29367	83694.81241	
TR N	86°27'49.5" W	351.550			
44			73478.97729	83343.93177	
TR N	89°31'27.0" W	349.280			
45			73481.87797	82994.66382	
TR N	85°18'01.0" W	202.600			
46			73498.47774	82792.74500	
IN S	88°10'08.9" E	1324.832			
27			72454.15076	84116.90087	

SURVEY 4-950331-4-0419

09-23-1998 5:25 PM Page 4

Reg. to: Enger Surveying & Engineering Co.

File Name: F:\33\690\SSI\33-690.DAT

Job: SEC 1 STOCKBRIDGE T1N R2E  
SEC 36 WHITE OAK T2N R2E  
INGHAM CO MI  
BK ST1, W01

By: DLC 8 AUG 1998

Point	Direction	Distance	Northing	Easting	Elevation
IN 46	N 88°10'08.9" W	1324.832	73498.47774	82792.74500	
IN 15	N 87°21'21.3" W	1316.451	73559.20790	81477.69550	
IN 8	N 88°43'14.0" W	2655.276	73618.49615	78823.08173	
IN 37	S 88°14'36.5" E	5296.308	73456.15079	84116.90087	

Measure Angle at point 25, backsighting point 23

MA AR 233°42'31.9" 1609.174 Foresighting point 27

File: 33-690.DAT

Session terminated at 5:27 PM on 09-23-1998

*[Handwritten mark]*

County Line  
Camps

W.O. - Iosco

359-00-39

91-45-16  
59-21

92-44 37"

173-31-20  
59-21  
174-28-38  
59-21  
175 28 00

1-11-  
178-00-34  
1-11-00  
8 59 94  
178 00-34  
21-30-39  
359-59-60  
157 21-55  
20238-05  
2661.80  
178 49-34  
178 2-10-26

177-56-43  
178-52-02

91-45-16  
104.02

358-16 51

75994.177  
84081.091

SURVEY 4-950331-4-0419 10-21-1998 2:57 PM Page 1  
Reg. to: Enger Surveying & Engineering Co.  
File Name: F:\33\690\SSI\33-690.DAT

Job: SEC 1 STOCKBRIDGE T1N R2E  
SEC 36 WHITE OAK T2N R2E  
INGHAM CO MI  
BK ST1, W01

By: DLC 8 AUG 1998

Point	Direction	Distance	Northing	Easting	Elevation
Start					
36	W01-66 RP SET 1/2" B&C		72683.97226	84158.53812	
IN	N 3°04'45.2" W	773.600			
37	W01-67 M-11? FD 1/2" P&C		73456.45534	84116.98279	
TR	N 0°59'21.2" W	2527.060			
57	W03-09 fd 1/2" b&c		75983.13871	84073.35450	
IN	S 0°59'21.2" E	2527.060			
37	W01-67 M-11? FD 1/2" P&C		73456.45534	84116.98279	
SS	S 2°09'30.5" E	125.460	from Base Point 37		
58	W03-09 fnd 3/4" bar		73331.08436	84121.70805	
SS	S 2°09'30.5" E	115.510	from Base Point 37		
59	W03-09 fnd 3/4" pipe		73341.02730	84121.33330	
Exit Side Shots, resume at point					
37	W01-67 M-11? FD 1/2" P&C		73456.45534	84116.98279	
IN	N 0°59'21.2" W	2527.060			
57	W03-09 fd 1/2" b&c		75983.13871	84073.35450	
SS	N 35°01'29.8" E	13.480	from Base Point 57		
61	W03-10 SET 40D CL KANE@FEN E		75994.17751	84081.09112	
SS	N 2°09'21.8" E	115.390	from Base Point 57		
62	W03-10 SET 40D CL KANE@FEN W		76098.44702	84077.69562	
Exit Side Shots, resume at point					
57	W03-09 fd 1/2" b&c		75983.13871	84073.35450	
TR	N 0°30'59.2" W	1647.520			
60	W03-10 RP SET 1/2" B&C		77630.59178	84058.50433	
SS	N 1°41'38.2" W	1129.330	from Base Point 60		
64	W03-11 FD RR SPK M-9?		78759.42825	84025.12053	
Exit Side Shots, resume at point					
60	W03-10 RP SET 1/2" B&C		77630.59178	84058.50433	
TR	N 1°45'56.2" W	1019.170			
63	W03-11 FD 1/2" BAR A-9?		78649.27791	84027.10272	
IN	N 1°01'51.4" W	110.168			
64	W03-11 FD RR SPK M-9?		78759.42825	84025.12053	
IN	S 1°07'54.8" E	2661.501			
62	W03-10 SET 40D CL KANE@FEN W		76098.44702	84077.69562	
IN	S 0°51'07.0" E	2642.284			
37	W01-67 M-11? FD 1/2" P&C		73456.45534	84116.98279	
IN	S 2°09'30.5" E	2655.233			
32	W01-64 M-12? FD 1/2" P&C		70803.10626	84216.98815	
IN	S 2°08'38.3" E	2681.122			
31	W01-63 M1 SB STAND MON		68123.86104	84317.29033	
IN	N 1°34'24.9" W	10639.580			
64	W03-11 FD RR SPK M-9?		78759.42825	84025.12053	
BB	S 1°34'24.9" E	2661.985			

to: Enger Surveying & Engineering Co.  
File Name: F:\33\690\SSI\33-690.DAT

Job: SEC 1 STOCKBRIDGE T1N R2E  
SEC 36 WHITE OAK T2N R2E  
INGHAM CO MI  
BK ST1, W01

By: DLC 8 AUG 1998

Point	Direction	Distance	Northing	Easting	Elevation
300			76098.44702	84098.22038	
BB	N 90°00'00.0" W	20.525			
62	W03-10 SET 40D CL KANE@FEN W		76098.44702	84077.69562	
Start					
64	W03-11 FD RR SPK M-9?		78759.42825	84025.12053	
BB	S 1°34'24.9" E	5304.973			
301			73456.45534	84170.79856	
BB	N 90°00'00.0" W	53.816			
37	W01-67 M-11? FD 1/2" P&C		73456.45534	84116.98279	
Start					
64	W03-11 FD RR SPK M-9?		78759.42825	84025.12053	
BB	S 1°34'24.9" E	7959.324			
302			70803.10626	84243.68875	
BB	N 90°00'00.0" W	26.701			
32	W01-64 M-12? FD 1/2" P&C		70803.10626	84216.98815	
Start					
48	W01-76 L-11 WD SET 3/4" B&C		73537.27755	81478.39227	
IN	S 88°14'43.9" E	2639.828			
37	W01-67 M-11? FD 1/2" P&C		73456.45534	84116.98279	
TR	S 88°14'43.9" E	9.000			
300	M-12?????		73456.17980	84125.97857	
IN	S 2°03'17.2" E	5335.750			
31	W01-63 M1 SB STAND MON		68123.86104	84317.29033	
IN	N 2°03'17.2" W	5335.750			
300	M-12?????		73456.17980	84125.97857	
IN	N 1°05'22.3" W	5304.207			
64	W03-11 FD RR SPK M-9?		78759.42825	84025.12053	
BB	S 1°05'22.3" E	2661.462			
301			76098.44702	84075.72750	
BB	N 90°00'00.0" E	1.968			
62	W03-10 SET 40D CL KANE@FEN W		76098.44702	84077.69562	
IN	S 1°02'48.7" E	2642.708			
300	M-12?????		73456.17980	84125.97857	
BB	S 2°03'17.2" E	2654.781			
302			70803.10626	84221.16496	
BB	N 90°00'00.0" W	4.177			
32	W01-64 M-12? FD 1/2" P&C		70803.10626	84216.98815	

91-45-16

359-05

358-54-38

104.02

Measure Angle at point 37, backsighting point 36

MA AR 182°05'24.0" 2527.060 Foresighting point 57



Reg. to: Enger Surveying &amp; Engineering Co.

File Name: F:\33\690\SSI\33-690.DAT

Job: SEC 1 STOCKBRIDGE T1N R2E

SEC 36 WHITE OAK T2N R2E

INGHAM CO MI

BK ST1, W01

By: DLC 8 AUG 1998

Point	Direction	Distance	Northing	Easting	Elevation
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TN	N 3°33'43" W	2669.690			
16	S14-13-C15=W01-54(K-12 1/2"B		70960.4843	78915.6040	
TN	S 1°52'52" E	2662.577			
5	S14-12-C16(K-13 WO 3/4"B&C		68299.3421	79003.0010	
TN	N 1°52'52" W	2662.577			
16	S14-13-C15=W01-54(K-12 1/2"B		70960.4843	78915.6040	
TN	N 1°59'37" W	2659.622			
8	S14-22-C23(K-11 WO 1/2" B&C		73618.4961	78823.0817	
List					
1	S14-11-C12 (K-2 T1NR2E T IR		66225.8333	79088.3996	
2	S14-12-C13(K-1 T1NR2E MON		68295.9517	79081.4678	
3	S14-10-C11 K-3 STKBR MON		63586.1026	79078.2955	
4	S14-13-C14(J-13 WO MON		68414.7986	76330.9142	
5	S14-12-C16(K-13 WO 3/4"B&C		68299.3421	79003.0010	
6	S14-17-C18(RP SET 6"SPK		72056.0107	78869.6444	
7	S14-22-C22(RP SET 6" SPK		72982.1145	78850.1007	
8	S14-22-C23(K-11 WO 1/2" B&C		73618.4961	78823.0817	
16	S14-13-C15=W01-54(K-12 1/2"B		70960.4843	78915.6040	

File: 33-690.DAT

Session terminated at 10:50 AM on 08-08-1998

Start  
 20 W01-57-20 K-2 STAND. MON 66225.83330 79088.39960  
 TR N 0°11'31.0" W 2070.020  
 18 W01-56 K-1 STAND MON 68295.84168 79081.46492  
 IN N 3°33'42.4" W 2669.800  
 16 S14-13-C15-W01-54(K-12 1/2"B 70960.48429 78915.60404

Measure Angle at point 18, backsighting point 16

MA AR 183°22'11.4" 2070.020 Foresighting point 20  
 MA AR 183°36'01.2" 4709.740 Foresighting point 3  
 MA AR 183°22'11.4" 2070.020 Foresighting point 1

Start  
 20 W01-57-20 K-2 STAND. MON 66225.83330 79088.39960  
 IN N 0°11'31.0" W 2070.020  
 18 W01-56 K-1 STAND MON 68295.84168 79081.46492  
 TR N 3°33'36.5" W 2669.690  
 16 W01-54 K-12 T2N R2E STAN MON 70960.37964 78915.68739  
 TR S 88°14'14.5" E 1330.340  
 11 W01-53 RP SET 1/2" B&C 70919.45971 80245.39792  
 TR N 59°34'19.5" E 439.710  
 12 W01-53 RP SET 1/2" B&C 71142.15258 80624.54534  
 TR N 20°45'57.5" E 2541.690  
 13 W01-53 RP SET 8" SPK 73518.72527 81525.70588  
 TR N 49°51'44.0" W 62.800  
 15 W01-54 L-11? FD 1/2" B&C 73559.20790 81477.69550  
 IN S 25°01'27.4" W 2913.216  
 11 W01-53 RP SET 1/2" B&C 70919.45971 80245.39792  
 IN N 59°34'19.5" E 439.710  
 12 W01-53 RP SET 1/2" B&C 71142.15258 80624.54534  
 TR S 46°11'45.5" E 399.810  
 14 W01-53 RP SET 1/2" B&C 70865.40653 80913.09285  
 TR S 89°13'38.5" E 653.260  
 17 W01-54 RP SET 1/2" B&C 70856.59753 81566.29345  
 IN N 87°45'28.0" W 2652.637  
 16 W01-54 K-12 T2N R2E STAN MON 70960.37964 78915.68739  
 IN S 3°33'36.5" E 2669.690  
 18 W01-56 K-1 STAND MON 68295.84168 79081.46492  
 SS N 88°11'31.0" W 78.630 from Base Point 18  
 21 W01-57 K-13 STAND. MON. 68298.32256 79002.87406  
 Exit Side Shots, resume at point  
 18 W01-56 K-1 STAND MON 68295.84168 79081.46492  
 IN S 0°11'31.0" E 2070.020  
 20 W01-57-20 K-2 STAND. MON 66225.83330 79088.39960  
 TR N 89°46'37.0" E 2608.100  
 22 W01-58 L-2 STAND MON 66235.98675 81696.47984  
 TR S 89°52'58.0" E 1234.040  
 23 W01-59 RP SET 1/2" B&C 66233.46201 82930.51725  
 TR S 53°28'49.5" E 1707.190  
 25 W01-60 RP SET 1/2" B&C 65217.51750 84302.50648  
 SS S 0°12'33.5" W 1608.900 from Base Point 25

27 W01-61 M-3? 1/2" BAR  
Exit Side Shots, resume at point

63608.62824 84296.62907

SURVEY 4-950331-4-0419 09-21-1998 1:33 PM Page 1  
Reg. to: Enger Surveying & Engineering Co.  
File Name: F:\33\690\SSI\33-690.DAT

Job: SEC 1 STOCKBRIDGE T1N R2E  
SEC 36 WHITE OAK T2N R2E  
INGHAM CO MI  
BK ST1, W01

By: DLC 8 AUG 1998

Point	Direction	Distance	Northing	Easting	Elevation
25	W01-60 RP SET 1/2" B&C		65217.51750	84302.50648	
TR	N 0°19'49.5" E	1063.030			
26	W01-61 M-2? CONC MON		66280.52982	84308.63679	
SS	S 73°56'23.5" W	27.870	from Base Point 26		
28	W01-62 STEEL FEN POST		66272.81970	84281.85451	
Exit Side Shots, resume at point					
26	W01-61 M-2? CONC MON		66280.52982	84308.63679	

File: 33-690.DAT  
Session terminated at 1:49 PM on 09-21-1998

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>

SURVEY 4-950331-4-0419 09-24-1998 5:02 PM Page 1  
 Reg. to: Enger Surveying & Engineering Co.  
 File Name: F:\33\690\SSI\33-690.DAT

Job: SEC 1 STOCKBRIDGE T1N R2E  
 SEC 36 WHITE OAK T2N R2E  
 INGHAM CO MI  
 BK ST1, W01

By: DLC 8 AUG 1998

Point	Direction	Distance	Northing	Easting	Elevation
Start					
41			66234.45446	81273.01382	
IN S	8°53'16.5" E	2691.600			
42			63575.17390	81688.87129	
TR N	0°02'26.5" W	18.690			
47	W01-71 L-3 SB STAND. B&C		63593.86389	81688.85801	
IN N	0°56'31.0" W	9926.221			
13	W01-53 RP SET 8" SPK		73518.74387	81525.67885	
IN N	49°51'47.9" W	62.800			
15	W01-54 L-11? FD 1/2" B&C		73559.22559	81477.66771	
TR S	1°53'26.9" E	21.960			
48	W01-76 L-11 WO SET 3/4" B&C		73537.27755	81478.39227	
IN N	88°14'52.9" W	2656.552			
8	S14-22-C23(K-11 WO 1/2" B&C		73618.49615	78823.08173	
IN S	88°14'48.4" E	5296.380			
37	W01-67 M-11? FD 1/2" P&C		73456.45534	84116.98279	
IN N	88°14'43.9" W	2639.828			
48	W01-76 L-11 WO SET 3/4" B&C		73537.27755	81478.39227	
IN S	1°42'48.7" E	7304.421			
27	W01-58 L-2 STAND MON		66236.12280	81696.81053	
IN S	89°53'08.1" E	1234.064			
23	W01-59 RP SET 1/2" B&C		66233.65827	82930.87216	
TR N	60°04'55.1" W	1409.370			
24	W01-60 RP SET 1/2" B&C		66936.59649	81709.31510	
SS N	7°36'41.6" W	13.000	from Base Point 24		
54	W01-01 ANCH POST		66949.48195	81707.59317	
Exit Side Shots, resume at point					
24	W01-60 RP SET 1/2" B&C		66936.59649	81709.31510	
TR N	68°56'23.1" W	387.190			
49	W01-01 RP SET 1/2" B&C		67075.73306	81347.98823	
TR N	17°02'53.9" E	1158.880			
50	WO -02 RP SET 12" SPK		68183.68942	81687.74633	
SS N	83°18'28.9" E	16.390	from Base Point 50		
51	WO -03 FD 1/2" B&C		68185.59937	81704.02467	
SS S	44°21'47.1" E	6.120	from Base Point 50		
52	WO -03 ANCH POST		68179.31409	81692.02545	
SS S	3°34'46.1" E	145.400	from Base Point 50		
53	WO -03 FEN ROW FROM SOUTH		68038.57307	81696.82406	
Exit Side Shots, resume at point					
50	WO -02 RP SET 12" SPK		68183.68942	81687.74633	

178-01-19  
 177-58-10  
 358-01-97.5

33-690

09-24-1998

5:22 PM

2-3 15 3.5' S. of 1st Line

2610.57' E of K-3  
2607.57' W. of Appendix K-3

5317.28

500/13 131' W  
2659.77  
2650.45  
20000.00  
500' 0" 11' 41" E  
2070.02

3  
189°49'47"E HZ  
2610.57  
189°46'32"E  
2607.81

2672.21  
N00°15'58"E  
1843.07  
N00°15'23"E

4

187°36'37"W  
2703.50  
187°35'33"W  
2624.70  
188°58'48"W  
2614.00

2663.46  
N°62'25'10N

18  
11'14" HD  
2652.58  
2651.24  
33  
50°08'38"E  
2681.12

2659.75  
N01°59'47"W

8  
2656.55  
5889'4'53"E  
2656.55  
5889'4'44"E  
2639.85  
35  
50°05'30"E  
2655.23

2656.55  
2639.83  
5889'4'53"E  
5889'4'44"E

# E STOCKBRIDGE

1-1

1/2" pipe NE. 31.5'  
24" Maple NE. 33.0'  
12" Walnut S. 33.0'  
NE cor. house S. 83.5'

