Universal Propulsion Company
2011 Annual Monitoring Report

Tables

ARCADIS

3994003

Table 1
UPCO Monitor Well Information

Well ID	Longitude	Latitude	ADWR Number	Total Casing Depth (feet bgs)	Screened Interval (feet bgs)	Measuring Point Elevation **** (feet amsl)
MW-1	112°04'13.76"W	33°42'47.61"N	55-201495	240	190-240	1557.22 [1560.43]
MW-2	112°04'13.03"W	33°42'53.39"N	55-201494	250	200-250	1567.62 [1571.22]
MW-3	112°04'20.91"W	33°43'03.49"N	55-204197	271	221-271	1583.59
MW-4	112°04'01.27"W	33°43'06.49"N	55-204196	300	245-295	1620.34
MW-5	112°04'04.97"W	33°42'58.13"N	55-204195	285	230-280	1590.45 [1594.08]
MW-6	112°04'25.09"W	33°42'50.47"N	55-204194	210	155-205	1548.22 [1551.65]
MW-7	112°04'26.79"W	33°42'42.34"N	55-205001	210	155-205	1541.35
MW-8	112°04'11.43"W	33°42'38.66"N	55-205002	235	180-230	1542.18
MW-9	112°04'00.37"W	33°42'38.46"N	55-901548	255	200-250	1565.60
MW-10	112°04'36.07"W	33°42'47.49"N	55-901549	205	150-200	1536.11
MW-11	112°04'02.46"W	33°42'54.85"N	55-903736	315	260-310	1603.35 [1606.14]
MW-12	112°04'13.93"W	33°42'88.09"N	55-903737	480	450-480	1557.46 [1560.91]
MW-13	112°04'02.97"W	33°42'59.55"N	55-217221	490	440-490	1595.77 [1599.52]
MW-14	112°04'13.66"W	33°43'10.34"N	55-217222	500	445-495	1602.48
MW-15	112°04'13.82"W	33°43'09.86"N	55-217223	325	270-320	1600.48
MW-16*	33°43'04.05"N	112°04'20.93"W	55-913047	500	445-495	1585.36
MW-17*	33°42'54.33"N	112°04'27.02"W	55-913046	260	205-255	1560.72
MW-18	112°04'21.74"W	33°42'37.32"N	55-911047	230	175-225	1533.53
MW-19*	33°42'59.39"N	112°04'03.14"W	55-913045	260	205-255	1599.51
SVMW-1**	112°04'17.61"W	33°42'52.99"N	55-909947	200***	30 - 40 90 - 100 140 - 150 190 - 200	NA
Production Well (PW-1)	112°04'24.00"W	33°42'51.40"N	55-500290	500	420-480	1554.55

Notes:
* = Installed during the 2nd Quarter in 2011. Measuring points were surveyed on April 15, 2011.
** = SVMW-1 is a Soil Vapor Montioring Well constructed above groundwater level
*** = Total depth of the nested well
**** = Measuring points were resurveyed on September 28, 2009 at wells MW-1, MW-2, MW-5, MW-6, MW-12, and MW-13 and on June 10, 2010 at MW-11 after monument installation, revised elevation is indicated in brackets.

ADWR = Arizona Department of Water Resources
amsl = Above mean sea level
bgs = below ground surface
NA = Not applicable

Table 2
Private Well Information

Address	ADWR Well Registraiton ID	Well Use	Date Installed	Well Depth (Feet)	Measuring Point Elevation (feet amsl)
616/604 E. YEARLING	NA	Domestic	NA	NA	NA
520 E. YEARLING	NA	Domestic	NA	NA	1635.71
424 E. YEARLING	NA	Domestic	NA	NA	NA
412 E. YEARLING	NA	Domestic	NA	NA	NA
218 E. YEARLING	55-207497*	Domestic	2/28/2006	415	1617.01
204 E. YEARLING	NA	Domestic	NA	NA	NA
25903 N. 2ND ST	NA	Domestic	NA	NA	NA
25825 N. 1ST PLACE	55-557685	Domestic	7/22/1996	495	NA
16 E. YEARLING	55-578534	Domestic	1/26/2000	738	NA
18 E. YEARLING	55-212662	Domestic	5/14/2007	520	1596.79
8 W. YEARLING	55-205738	Domestic	12/2/2005	260	NA
106 W. YEARLING	55-583418	Domestic	1/9/2001	440	NA
122 W. YEARLING	NA	Domestic	NA	NA	NA

Notes:
NA = not available or corresponding ADWR registry number could not be identified with the current owner or address.
* = Replacement well installed in 2006

Table 3
UPCO Monitor Wells Sampled and Analyses Performed in 2011

Sample ID	Date	Laboratory ID	Metals			Perchlorate		Volatile Organic Compounds		Inorganics		
			200.7	200.8	245.1	314.0	332.0	8260B	8260B-SIM	300.0	SM 2540C	SM 2320B
MW-1	03/02/11	PUC0174-05		X	X	X		X	X			
	04/26/11	PUD1525-02				X						
	10/27/11	PUJ1701-03				X		X	X			
MW-2	03/02/11	PUC0174-06		X	X	X		X	X			
	04/26/11	PUD1525-03				X						
	10/27/11	PUJ1701-01				X		X	X			
MW-3	02/25/11	PUB1607-06		X	X	X		X	X			
	02/25/11	PUB1619-01					X					
	07/28/11	PUG1811-04					X					
	07/28/11	PUG1815-04				X						
MW-4	02/25/11	PUB1607-03		X	X	X		X	X			
	02/25/11	PUB1616-01					X					
	07/29/11	PUG1900-01					X					
	07/29/11	PUG1899-01				X						
MW-5	03/02/11	PUC0174-04		X	X	X		X	X			
	04/26/11	PUD1525-01				X						
	07/29/11	PUG1899-04				X						
	10/26/11	PUJ1621-03				X						
MW-6	02/25/11	PUB1607-07		X	X	X		X	X			
	04/27/11	PUD1587-01				X						
	07/28/11	PUG1815-05				X						
	10/27/11	PUJ1701-02				X						
MW-7	02/25/11	PUB1607-05		X	X	X		X	X			
	02/25/11	PUB1618-01					X					
	07/28/11	PUG1811-01					X					
	07/28/11	PUG1815-01				X						
MW-8	03/01/11	PUC0076-01					X					
	03/01/11	PUC0073-05		X	X	X		X	X			
	07/28/11	PUG1811-02					X					
	07/28/11	PUG1815-02		X	X	X						
MW-9	03/01/11	PUC0077-01					X					
	03/01/11	PUC0073-06		X	X	X		X	X			
	07/27/11	PUG1719-01					X					
	07/27/11	PUG1726-01				X						
MW-10	02/25/11	PUB1607-04		X	X	X		X	X			
	02/25/11	PUB1617-01					X					
	07/28/11	PUG1815-03				X						
	07/28/11	PUG1811-03					X					
MW-11	02/28/11	PUB1675-03		X	X	X		X	X			
	02/28/11	PUB1676-01					X					
	07/29/11	PUG1900-03					X					
	07/29/11	PUG1899-03				X						
MW-12	03/01/11	PUC0073-07		X	X	X		X	X			
	03/01/11	PUC0078-01					X					
	07/29/11	PUG1899-05				X						
	07/29/11	PUG1900-04					X					
MW-13	03/02/11	PUC0174-03		X	X	X		X	X			
	04/27/11	PUD1587-02				X						
	08/02/11	PUH0158-03				X						
	10/26/11	PUJ1621-02				X						
MW-14	03/01/11	PUC0073-03						X				
	03/01/11	PUC0075-01					X					
	03/01/11	PUC0073-03		X	X	X		X	X			
	08/02/11	PUH0158-01				X						

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UPCO Monitor Wells Sampled and Analyses Performed in 2011

Sample ID	Date	Laboratory ID	Metals			Perchlorate		Volatile Organic Compounds		Inorganics		
			200.7	200.8	245.1	314.0	332.0	8260B	8260B-SIM	300.0	SM 2540C	SM 2320B
MW-15	03/01/11	PUC0073-04		X	X	X		X	X			
	03/01/11	PUC0074-01					X					
	07/29/11	PUG1900-02					X					
	07/29/11	PUG1899-02				X						
MW-16	04/28/11	PUD1694-01					X					
	04/28/11	PUD1699-04	X	X	X	X		X	X	X	X	X
	08/02/11	PUH0158-02				X						
MW-17	04/28/11	PUD1695-01					X					
	04/28/11	PUD1699-03	X	X	X	X		X	X	X	X	X
MW-18	03/30/11	PUC1923-01					X					
	03/30/11	PUC1922-03		X	X	X		X	X			
	08/02/11	PUH0158-04		X	X	X						
MW-19	04/28/11	PUD1699-05	X	X	X	X		X	X	X	X	X
	08/03/11	PUH0188-01				X						
	10/27/11	PUJ1701-04				X						

Notes:
EPA test method 200.7 used for calcium, magnesium, potassium, and sodium analyses
EPA test method 200.8 used for arsenic, barium, cadium, chromium, lead, selenium, and silver analyses
EPA test method 245.1 used for mercury analysis
EPA test methods 314.0 and 332.0 used for perchlorate analyses
EPA test method 8260B used for volatile organic compound analyses
EPA test method 8260B-SIM used for 1,4-dioxane analyses
EPA test method 300.0 used for chloride, nitrate-n, and sulfate analyses
Standard Method 2540C used for total dissolved solids analyses
Standard Method 2320B used for alkalinity analyses
Monitor wells MW-16, MW-17, and MW-19 were installed during the 2nd Quarter of 2011

Table 4
2011 UPCO Monitor Well Water Levels

Well ID	Date	Depth to Water (ft)	Measuring Point Elevation (ft)	Groundwater Elevation (ft amsl)
MW-1	2/23/2011	211.71	1560.43	1348.72
	3/22/2011	211.73	1560.43	1348.70
	4/26/2011	211.77	1560.43	1348.66
	5/27/2011	211.95	1560.43	1348.48
	6/30/2011	211.79	1560.43	1348.64
	7/25/2011	212.02	1560.43	1348.41
	9/2/2011	211.81	1560.43	1348.62
	9/27/2011	211.82	1560.43	1348.61
	10/24/2011	211.88	1560.43	1348.55
	11/28/2011	211.90	1560.43	1348.53
	12/27/2011	211.92	1560.43	1348.51
MW-2	2/23/2011	222.53	1571.22	1348.69
	3/22/2011	222.60	1571.22	1348.62
	4/26/2011	222.55	1571.22	1348.67
	5/27/2011	222.56	1571.22	1348.66
	6/30/2011	222.61	1571.22	1348.61
	7/25/2011	222.84	1571.22	1348.38
	9/2/2011	222.61	1571.22	1348.61
	9/27/2011	221.61	1571.22	1349.61
	10/24/2011	222.71	1571.22	1348.51
	11/28/2011	222.71	1571.22	1348.51
	12/27/2011	222.76	1571.22	1348.46
MW-3	2/23/2011	240.15	1583.59	1343.44
	3/22/2011	240.46	1583.59	1343.13
	4/25/2011	240.53	1583.59	1343.06
	5/27/2011	240.77	1583.59	1342.82
	6/30/2011	240.81	1583.59	1342.78
	7/25/2011	241.04	1583.59	1342.55
	9/2/2011	241.11	1583.59	1342.48
	9/27/2011	241.15	1583.59	1342.44
	10/24/2011	241.23	1583.59	1342.36
	11/28/2011	241.26	1583.59	1342.33
	12/27/2011	241.42	1583.59	1342.17

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2011 UPCO Monitor Well Water Levels

Well ID	Date	Depth to Water (ft)	Measuring Point Elevation (ft)	Groundwater Elevation (ft amsl)
MW-4	2/23/2011	276.84	1620.34	1343.50
	3/22/2011	276.97	1620.34	1343.37
	4/25/2011	276.92	1620.34	1343.42
	5/27/2011	276.94	1620.34	1343.40
	6/30/2011	277.11	1620.34	1343.23
	7/25/2011	277.39	1620.34	1342.95
	9/2/2011	277.28	1620.34	1343.06
	9/27/2011	277.29	1620.34	1343.05
	10/24/2011	277.38	1620.34	1342.96
	11/28/2011	277.53	1620.34	1342.81
	12/27/2011	277.59	1620.34	1342.75
MW-5	2/23/2011	245.38	1594.08	1348.70
	3/22/2011	245.37	1594.08	1348.71
	4/26/2011	245.43	1594.08	1348.65
	5/27/2011	245.39	1594.08	1348.69
	6/30/2011	245.41	1594.08	1348.67
	7/25/2011	245.64	1594.08	1348.44
	9/2/2011	245.44	1594.08	1348.64
	9/27/2011	245.45	1594.08	1348.63
	10/24/2011	245.50	1594.08	1348.58
	11/28/2011	245.53	1594.08	1348.55
	12/27/2011	245.56	1594.08	1348.52
MW-6	2/23/2011	162.70	1551.65	1388.95
	3/22/2011	163.03	1551.65	1388.62
	4/26/2011	162.62	1551.65	1389.03
	5/27/2011	162.82	1551.65	1388.83
	6/30/2011	162.68	1551.65	1388.97
	7/25/2011	163.13	1551.65	1388.52
	9/2/2011	163.19	1551.65	1388.46
	9/27/2011	163.47	1551.65	1388.18
	10/24/2011	163.80	1551.65	1387.85
	11/28/2011	164.37	1551.65	1387.28
	12/27/2011	164.70	1551.65	1386.95

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2011 UPCO Monitor Well Water Levels

Well ID	Date	Depth to Water (ft)	Measuring Point Elevation (ft)	Groundwater Elevation (ft amsl)
MW-7	2/23/2011	162.20	1541.35	1379.15
	3/22/2011	162.36	1541.35	1378.99
	4/25/2011	162.25	1541.35	1379.10
	5/27/2011	162.24	1541.35	1379.11
	6/30/2011	162.93	1541.35	1378.42
	7/25/2011	162.66	1541.35	1378.69
	9/2/2011	162.41	1541.35	1378.94
	9/27/2011	162.42	1541.35	1378.93
	10/24/2011	162.50	1541.35	1378.85
	11/28/2011	162.64	1541.35	1378.71
	12/27/2011	162.61	1541.35	1378.74
MW-8	2/23/2011	193.59	1542.18	1348.59
	3/22/2011	193.66	1542.18	1348.52
	4/25/2011	193.60	1542.18	1348.58
	5/27/2011	193.65	1542.18	1348.53
	6/30/2011	193.68	1542.18	1348.50
	7/25/2011	193.85	1542.18	1348.33
	9/2/2011	193.69	1542.18	1348.49
	9/27/2011	193.70	1542.18	1348.48
	10/24/2011	193.76	1542.18	1348.42
	11/28/2011	193.74	1542.18	1348.44
	12/27/2011	193.75	1542.18	1348.43
MW-9	2/23/2011	216.90	1565.60	1348.70
	3/22/2011	216.92	1565.60	1348.68
	4/25/2011	216.86	1565.60	1348.74
	5/27/2011	216.93	1565.60	1348.67
	6/30/2011	216.93	1565.60	1348.67
	7/25/2011	217.11	1565.60	1348.49
	9/2/2011	216.92	1565.60	1348.68
	9/27/2011	216.94	1565.60	1348.66
	10/24/2011	216.99	1565.60	1348.61
	11/28/2011	216.95	1565.60	1348.65
	12/27/2011	217.00	1565.60	1348.60

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2011 UPCO Monitor Well Water Levels

Well ID	Date	Depth to Water (ft)	Measuring Point Elevation (ft)	Groundwater Elevation (ft amsl)
MW-10	2/23/2011	154.90	1536.11	1381.21
	3/22/2011	154.95	1536.11	1381.16
	4/25/2011	154.93	1536.11	1381.18
	5/27/2011	154.93	1536.11	1381.18
	6/30/2011	155.00	1536.11	1381.11
	7/25/2011	155.40	1536.11	1380.71
	9/2/2011	155.12	1536.11	1380.99
	9/27/2011	155.22	1536.11	1380.89
	10/24/2011	155.31	1536.11	1380.80
	11/28/2011	155.51	1536.11	1380.60
	12/27/2011	155.57	1536.11	1380.54
MW-11	2/23/2011	254.81	1603.35	1348.54
	3/22/2011	254.81	1603.35	1348.54
	4/25/2011	254.79	1603.35	1348.56
	5/27/2011	254.82	1603.35	1348.53
	6/30/2011	254.85	1603.35	1348.50
	7/25/2011	255.09	1603.35	1348.26
	9/2/2011	254.86	1603.35	1348.49
	9/27/2011	254.89	1603.35	1348.46
	10/24/2011	254.93	1603.35	1348.42
	11/28/2011	254.94	1603.35	1348.41
	12/27/2011	254.99	1603.35	1348.36
MW-12	2/23/2011	213.34	1560.91	1347.57
	3/22/2011	213.39	1560.91	1347.52
	4/25/2011	213.33	1560.91	1347.58
	5/27/2011	212.37	1560.91	1348.54
	6/30/2011	213.41	1560.91	1347.50
	7/25/2011	213.67	1560.91	1347.24
	9/2/2011	213.46	1560.91	1347.45
	9/27/2011	213.43	1560.91	1347.48
	10/24/2011	213.52	1560.91	1347.39
	11/28/2011	213.52	1560.91	1347.39
	12/27/2011	213.54	1560.91	1347.37

Table 4
2011 UPCO Monitor Well Water Levels

Well ID	Date	Depth to Water (ft)	Measuring Point Elevation (ft)	Groundwater Elevation (ft amsl)
MW-13	2/23/2011	250.82	1599.52	1348.70
	3/22/2011	250.86	1599.52	1348.66
	4/26/2011	250.82	1599.52	1348.70
	5/27/2011	250.82	1599.52	1348.70
	6/30/2011	250.92	1599.52	1348.60
	7/25/2011	251.22	1599.52	1348.30
	9/2/2011	250.90	1599.52	1348.62
	9/27/2011	250.87	1599.52	1348.65
	10/24/2011	250.98	1599.52	1348.54
	11/28/2011	250.93	1599.52	1348.59
	12/27/2011	251.03	1599.52	1348.49
MW-14	2/23/2011	266.62	1602.48	1335.86
	3/22/2011	266.57	1602.48	1335.91
	4/25/2011	266.85	1602.48	1335.63
	5/27/2011	267.75	1602.48	1334.73
	6/30/2011	267.44	1602.48	1335.04
	7/25/2011	267.81	1602.48	1334.67
	9/2/2011	268.00	1602.48	1334.48
	9/27/2011	268.12	1602.48	1334.36
	10/24/2011	268.11	1602.48	1334.37
	11/28/2011	268.04	1602.48	1334.44
	12/27/2011	268.10	1602.48	1334.38
MW-15	2/23/2011	265.33	1600.48	1335.15
	3/22/2011	265.45	1600.48	1335.03
	4/25/2011	265.35	1600.48	1335.13
	5/27/2011	265.84	1600.48	1334.64
	6/30/2011	265.90	1600.48	1334.58
	7/25/2011	266.19	1600.48	1334.29
	9/2/2011	266.25	1600.48	1334.23
	9/27/2011	266.27	1600.48	1334.21
	10/24/2011	266.51	1600.48	1333.97
	11/28/2011	266.58	1600.48	1333.90
	12/27/2011	266.70	1600.48	1333.78

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Well ID	Date	Depth to Water (ft)	Measuring Point Elevation (ft)	Groundwater Elevation (ft amsl)
MW-16	4/25/2011	253.89	1585.36	1331.47
	5/27/2011	254.05	1585.36	1331.31
	6/30/2011	254.26	1585.36	1331.10
	7/25/2011	254.35	1585.36	1331.01
	9/2/2011	254.40	1585.36	1330.96
	9/27/2011	254.38	1585.36	1330.98
	10/24/2011	254.59	1585.36	1330.77
	11/28/2011	255.64	1585.36	1329.72
	12/27/2011	254.84	1585.36	1330.52
MW-17	4/25/2011	206.72	1560.72	1354.00
	5/27/2011	206.78	1560.72	1353.94
	6/30/2011	206.92	1560.72	1353.80
	7/25/2011	207.18	1560.72	1353.54
	9/2/2011	206.93	1560.72	1353.79
	9/27/2011	207.06	1560.72	1353.66
	10/24/2011	207.15	1560.72	1353.57
	11/28/2011	207.24	1560.72	1353.48
	12/27/2011	207.33	1560.72	1353.39
MW-18	2/23/2011	130.17	1533.53	1403.36
	3/22/2011	130.20	1533.53	1403.33
	4/25/2011	130.99	1533.53	1402.54
	5/27/2011	130.70	1533.53	1402.83
	6/30/2011	130.61	1533.53	1402.92
	7/25/2011	130.84	1533.53	1402.69
	9/2/2011	130.99	1533.53	1402.54
	9/27/2011	130.91	1533.53	1402.62
	10/24/2011	130.88	1533.53	1402.65
	11/28/2011	131.00	1533.53	1402.53
	12/27/2011	130.98	1533.53	1402.55

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2011 UPCO Monitor Well Water Levels

Well ID	Date	Depth to Water (ft)	Measuring Point Elevation (ft)	Groundwater Elevation (ft amsl)
MW-19	4/25/2011	250.80	1599.51	1348.71
	5/27/2011	251.40	1599.51	1348.11
	6/30/2011	250.87	1599.51	1348.64
	7/25/2011	251.05	1599.51	1348.46
	9/2/2011	250.88	1599.51	1348.63
	9/27/2011	250.90	1599.51	1348.61
	10/24/2011	250.94	1599.51	1348.57
	11/28/2011	250.94	1599.51	1348.57
	12/27/2011	251.00	1599.51	1348.51
PW-1	9/27/2011	209.02	1554.55	1345.53
	10/24/2011	209.03	1554.55	1345.52
	11/28/2011	209.20	1554.55	1345.35
	12/27/2011	209.12	1554.55	1345.43

Notes:
Measuring points were resurveyed on September 28, 2009 at wells MW-1, MW-2, MW-5, MW-6, MW-12, and MW-13.
Measuring point was resurveyed on June 10, 2010 at well MW-11.
Monitor wells MW-16, MW-17, and MW-19 were installed during the 2nd quarter of 2011
ft = feet
amsl = Above mean sea level

Table 5
Private Wells Sampled and Analyses Performed in 2011

Sample ID	Date Collected	Laboratory ID	EPA Method	
			314.0	332.0
106 W.Yearling	07/26/11	PUG1621-01		X
	07/26/11	PUG1639-01	X	
122 W. Yearling	02/25/11	PUB1608-01	X	
	02/25/11	PUB1615-01		X
	07/26/11	PUG1629-01	X	
	07/26/11	PUG1615-01		X
16 E. Yearling	02/24/11	PUB1530-01	X	
	02/24/11	PUB1535-01		X
	07/26/11	PUG1620-02		X
	07/26/11	PUG1632-02	X	
18 E. Yearling	02/23/11	PUB1430-01	X	
	02/23/11	PUB1434-01		X
204 E. Yearling	02/23/11	PUB1431-01	X	
	02/23/11	PUB1435-01		X
	07/26/11	PUG1631-01	X	
	07/26/11	PUG1619-01		X
218 E. Yearling	02/23/11	PUB1429-01	X	
	02/23/11	PUB1433-01		X
	07/26/11	PUG1609-01		X
	07/26/11	PUG1612-01	X	
25825 N. 1st Place	02/24/11	PUB1531-01	X	
	02/24/11	PUB1536-01		X
	07/27/11	PUG1724-01		X
	07/27/11	PUG1729-01	X	
25903 N. 2nd St	02/24/11	PUB1533-01	X	
	02/24/11	PUB1537-01		X
412 E. Yearling	02/25/11	PUB1609-01	X	
	02/25/11	PUB1614-01		X
	07/27/11	PUG1727-01	X	
	07/27/11	PUG1723-01		X
424 E. Yearling	02/25/11	PUB1611-01	X	
	02/25/11	PUB1612-01		X
	07/26/11	PUG1623-01		X
	07/26/11	PUG1637-01	X	
520 E. Yearling	02/23/11	PUB1428-01	X	
	02/23/11	PUB1432-01		X
	07/26/11	PUG1626-01		X
	07/26/11	PUG1635-01	X	

Table 5
Private Wells Sampled and Analyses Performed in 2011

Sample ID	Date Collected	Laboratory ID	EPA Method	
			314.0	332.0
604-616 E. Yearling	02/25/11	PUB1610-01	X	
	02/25/11	PUB1613-01		X
	07/26/11	PUG1634-01	X	
	07/26/11	PUG1627-01		X
8 W. Yearling	02/24/11	PUB1529-01	X	
	02/24/11	PUB1534-01		X
	07/26/11	PUG1630-01	X	
	07/26/11	PUG1617-01		X

Notes:
EPA test methods 314.0 and 332.0 used for perchlorate analyses

Table 6
2011 UPCO Monitor Well Perchlorate Results

Sample ID	Date	Perchlorate (ug/L)	
		EPA 314.0	EPA 332.0
MW-1	03/02/11	67	NA
	04/26/11	70	NA
	10/27/11	73	NA
MW-2	03/02/11	87	NA
	04/26/11	87	NA
	10/27/11	90	NA
MW-3	02/25/11	<2.0	0.53
	07/28/11	<2.0	0.59
MW-4	02/25/11	<2.0	0.61
	07/29/11	<2.0	0.61
MW-5	03/02/11	20	NA
	04/26/11	23	NA
	07/29/11	22	NA
	10/26/11	25	NA
MW-6	02/25/11	17	NA
	04/27/11	18	NA
	07/28/11	14	NA
	10/27/11	18	NA
MW-7	02/25/11	<2.0	0.65
	07/28/11	<2.0	0.60
MW-8	03/01/11	<2.0	1.1
	07/28/11	<2.0	1.0
MW-9	03/01/11	<2.0	0.75
	07/27/11	<2.0 UJ	2.7
MW-10	02/25/11	<2.0	1.0
	07/28/11	<2.0	0.92
MW-11	02/28/11	<2.0	2.2
	07/29/11	2.0	2.0
MW-12	03/01/11	<2.0	0.79
	07/29/11	<2.0	0.71
MW-13	03/02/11	6.4	NA
	04/27/11	7.0	NA
	08/02/11	7.4	NA
	10/26/11	8.7	NA
MW-14	03/01/11	<2.0	0.90
	08/02/11	<2.0	NA
MW-15	03/01/11	<2.0	0.79
	07/29/11	<2.0	0.77

Table 6
2011 UPCO Monitor Well Perchlorate Results

Sample ID	Date	Perchlorate (ug/L)	
		EPA 314.0	EPA 332.0
MW-16	04/28/11	<2.0	0.65
	08/02/11	<2.0	NA
MW-17	04/28/11	<2.0	0.73
MW-18	03/30/11	<2.0	<0.50 UJ
	08/02/11	<2.0	NA
MW-19	04/28/11	55000	NA
	08/03/11	48000	NA
	10/27/11	45000	NA
PW-1	03/30/11	3.8	NA
	09/06/11	4.1	NA
	10/25/11	4.4	NA

Notes:
NA = Not analyzed
< = Analyte not detected above the listed laboratory reporting limit
J = Analyte was positively identified, however the result should be considered an estimated value
UJ = The reporting limit is considered an estimated value
ug/L = Micrograms per liter

Table 7
2011 Private Well Perchlorate Results

Sample ID	Date	Perchlorate (ug/L)	
		EPA 314.0	EPA 332.0
106 W.Yearling	07/26/11	<2.0 UJ	0.57
122 W. Yearling	02/25/11	<2.0	0.68
	07/26/11	<2.0 UJ	0.63
16 E. Yearling	02/24/11	<2.0	1.8
	07/26/11	<2.0 UJ	0.65
18 E. Yearling	02/23/11	<2.0	0.00099
204 E. Yearling	02/23/11	<2.0	0.00089
	07/26/11	<2.0 UJ	0.72
218 E. Yearling	02/23/11	<2.0	0.0010
	07/26/11	<2.0 UJ	0.69
25825 N. 1st Place	02/24/11	<2.0	1.0
	07/27/11	<2.0 UJ	0.67
25903 N. 2nd St	02/24/11	<2.0	0.88
412 E. Yearling	02/25/11	<2.0	1.3
	07/27/11	<2.0 UJ	1.3
424 E. Yearling	02/25/11	<2.0	1.7
	07/26/11	<2.0 UJ	1.7
520 E. Yearling	02/23/11	<2.0	0.0014
	07/26/11	<2.0 UJ	1.4
604-616 E. Yearling	02/25/11	<2.0	1.1
	07/26/11	<2.0 UJ	1.2
8 W. Yearling	02/24/11	<2.0	0.71
	07/26/11	<2.0 UJ	0.74

Notes:

ug/L = Micrograms per liter

< = Analyte not detected above the listed laboratory reporting limit

J = Analyte was positively identified, however the result should be considered an estimated value

NA=Not analyzed

Table 8
Soil Vapor Monitor Well (SVMW-1) Results

Parameter	SVMW-1-30-40				SVMW-1-90-100				SVMW-1-140-150				SVMW-1-190-200			
	2/24/2011	4/25/2011	7/26/2011	10/25/2011	2/24/2011	4/25/2011	7/26/2011	10/25/2011	2/24/2011	4/25/2011	7/26/2011	10/25/2011	2/24/2011	4/25/2011	7/26/2011	10/25/2011
Volatile Organic Compounds (ppbv)																
1,1,1-Trichloroethane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,1,2,2-Tetrachloroethane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,1,2-Trichloroethane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,1-Dichloroethane	5.7	9.3	21	20	26	12	19	1.6	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,1-Dichloroethene	460	2300	2600	1900	5300	6700	6900	540	47	280	850	30	36	210	660	530
1,2,4-Trichlorobenzene	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0
1,2,4-Trimethylbenzene	<0.50	<5.0	0.55	0.62	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,2-Dibromoethane (EDB)	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<10	<1.0	<1.0
1,2-Dichlorobenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,2-Dichloroethane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,2-Dichloropropane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,3,5-Trimethylbenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,3-Butadiene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,3-Dichlorobenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
1,4-Dichlorobenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
2,2,4-Trimethylpentane	<0.50	<5.0	<0.50	0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	0.73	<0.50	<5.0	<0.50	<0.50
2-Butanone (MEK)	27	160	21	64 J	10	260	48 J	40	9.6 J	100	56 J	45	11	84 J	67 J	33 J
2-Hexanone	1.4	9.5	<19	7.5	1.0	15	<20	2.6	<1.0	<9.9	<20	4.5	<1.0	<10	<20	7.3
2-Propanol	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<20	<39	<2.0	<2.0	<20	<2.0	<2.0
4-Ethyltoluene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
4-Methyl-2-pentanone (MIBK)	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<10	<1.0	<1.0
Acetone	76 J	1500 J	<97	220 J	25 J	2500 J	110 J	100 J	46 J	1200 J	120 J	110 J	45 J	450	140 J	120 J
Allyl Chloride	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Benzene	<0.50	<5.0	1.3	1.2	1.8	<5.0	1.9	0.50	<0.50	<5.0	1.5	8.0	<0.50	<5.0	0.97	0.90
Benzyl Chloride	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0
Bromodichloromethane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Bromoethene(Vinyl Bromide)	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Bromoform	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Bromomethane	<0.50	<5.0	0.88	0.63	<0.50	<5.0	1.3	1.7	<0.50	<5.0	<0.50	0.54	<0.50	<5.0	<0.50	<0.50
Carbon disulfide	0.50	<5.0	1.1	1.2	1.4	<5.0	0.88	<0.50	0.58	<5.0	3.0	<0.50	<0.50	<5.0	0.90	0.51
Carbon tetrachloride	<0.50	<5.0	<0.50	<0.50	0.84	<5.0	0.51	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Chlorobenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Chloroethane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Chloroform	1.5	<5.0	5.3	4.7	2.6	<5.0	1.8	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Chloromethane	<0.50	<5.0	5.6	0.52	0.90	<5.0	0.68	0.65	<0.50	<5.0	1.7	0.83	0.66	<5.0	1.0	0.73
cis-1,2-Dichloroethene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
cis-1,3-Dichloropropene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Cyclohexane	<0.50	<5.0	0.56 J	<0.50	0.76 J	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Dibromochloromethane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Dichlorodifluoromethane	1.7	<5.0	3.9	3.7	6.4	<5.0	4.3	0.60	<0.50	<5.0	0.71	<0.50	<0.50	<5.0	0.58	0.60
Dichlorotetrafluoroethane(F-114)	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Ethyl Acetate	<0.50	<5.0	2.5	0.68	<0.50	<5.0	0.56	<0.50	<0.50	<5.0	1.2	2.0	<0.50	<5.0	0.61	<0.50
Ethylbenzene	<0.50	<5.0	<0.50	1.3	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Freon 113	1.3	<5.0	4.1	3.9	5.7	<5.0	4.2	<0.50	<0.50	<5.0	0.95	<0.50	<0.50	<5.0	<0.50	<0.50
Heptane	<0.50	11	<0.50	<0.50	<0.50	18	<0.50	<0.50	<0.50	5.9	<0.50	<0.50	<0.50	6.1	<0.50	<0.50
Hexachlorobutadiene	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<10	<1.0	<1.0
Hexane	<0.50	<5.0	<0.50	2.3	0.75	<5.0	1.5	1.0	<0.50	<5.0	1.4	1.8	<0.50	<5.0	1.4	1.2
Isopropylbenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
m,p-Xylenes	<1.0	<9.9	<1.0	5.7	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<10	<1.0	<1.0

Table 8
Soil Vapor Monitor Well (SVMW-1) Results

Parameter	SVMW-1-30-40				SVMW-1-90-100				SVMW-1-140-150				SVMW-1-190-200			
	2/24/2011	4/25/2011	7/26/2011	10/25/2011	2/24/2011	4/25/2011	7/26/2011	10/25/2011	2/24/2011	4/25/2011	7/26/2011	10/25/2011	2/24/2011	4/25/2011	7/26/2011	10/25/2011
Volatile Organic Compounds (ppbv)																
Methylene Chloride	1.0 J	<5.0	3.2 J	2.8 J	3.0 J	<5.0	2.2 J	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Methyl-tert-butyl Ether (MTBE)	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<9.9	<1.0	<1.0	<1.0	<10	<1.0	<1.0
Naphthalene	<5.0	<50	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	<50	<5.0	<5.0
n-Butylbenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
n-Nonane (C9)	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
n-Octane (C8)	<0.50	<5.0	<0.50	1.6	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
n-Propylbenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
o-Xylene	<0.50	<5.0	<0.50	1.2	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Propene	70	380	<0.50	<0.50	690	1400	<0.50	<0.50	15	300	<0.50	<0.50	28	160	<0.50	<0.50
sec-Butylbenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Styrene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
tert-Butylbenzene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Tetrachloroethene	150	14	69	28	48	31	58	32	17	56	5.1	12	3.5	<5.0	4.4	4.8
Tetrahydrofuran	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<20	<2.0	<2.0
Toluene	<0.50	<5.0	0.85	1.4	1.5	<5.0	1.8	<0.50	<0.50	<5.0	0.62	5.5	<0.50	<5.0	<0.50	<0.50
trans-1,2-Dichloroethene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
trans-1,3-Dichloropropene	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Trichloroethene	9.3	13	28	26	60	22	29	9.9	0.67	<5.0	1.0	<0.50	0.79	<5.0	0.68	0.85
Trichlorofluoromethane	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Vinyl Acetate	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
Vinyl chloride	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50

Notes:
< = Analyte was not detected above the listed laboratory reporting limit
J = Analyte was positively identified, however the result should be considered an estimated value
ppbv = Parts per billion by volume

Table 9
Proposed 2012 UPCO Sampling and Analysis Schedule

Well ID	Water levels	Quarter Sampled in 2012	Analyses Performed		
			Perchlorate	Metals	VOCs
MW-1	Conducted on a monthly basis	1	X (314.0)	X (200.8)	X
		2	X (314.0)		
		3	X (314.0)		X
		4	X (314.0)		
MW-2	Conducted on a monthly basis	1	X (314.0)	X (200.8)	X
		2	X (314.0)		
		3	X (314.0)		X
		4	X (314.0)		
MW-3	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			
MW-4	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			
MW-5	Conducted on a monthly basis	1	X (314.0)	X (200.8)	X
		2	X (314.0)		
		3	X (314.0)		
		4	X (314.0)		
MW-6	Conducted on a monthly basis	1	X (314.0)	X (200.8)	X
		2	X (314.0)		
		3	X (314.0)		
		4	X (314.0)		
MW-7	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			
MW-8	Conducted on a monthly basis	1	X (314 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)	X (200.8)	
		4			
MW-9	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			

Table 9
Proposed 2012 UPCO Sampling and Analysis Schedule

Well ID	Water levels	Quarter Sampled in 2012	Analyses Performed		
			Perchlorate	Metals	VOCs
MW-10	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			
MW-11	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			
MW-12	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			
MW-13	Conducted on a monthly basis	1	X (314.0)	X (200.8)	X
		2	X (314.0)		
		3	X (314.0)		
		4	X (314.0)		
MW-14	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			
MW-15	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)		
		4			
MW-16	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332**)		
		4			
MW-17	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332**)		
		4			
MW-18	Conducted on a monthly basis	1	X (314.0 & 332)	X (200.8)	X
		2			
		3	X (314.0 & 332)	X (200.8)	
		4			

Table 9
Proposed 2012 UPCO Sampling and Analysis Schedule

Well ID	Water levels	Quarter Sampled in 2012	Analyses Performed		
			Perchlorate	Metals	VOCs
MW-19	Conducted on a monthly basis	1	X (314.0)	X (200.8)	X
		2	X (314.0)		
		3	X (314.0)		
		4	X (314.0)		
PW-1	Conducted on a monthly basis	1	X (314.0)	X (200.8)	X
		2	X (314.0)		
		3	X (314.0)		X
		4	X (314.0)		
SVMW-1*	Conducted on a monthly basis	1			X (TO-15)
		2			
		3			
		4			
Private Wells	Conducted on a monthly basis***	1	X (314.0 & 332)		
		2			
		3	X (314.0 & 332)		
		4			

Notes:
Perchlorate = Test as indicated
Metals = Arsenic, barium, cadmium, chromium, lead, mercury (245.1), selenium, silver, and as noted
VOCs = Volatile organic compounds include 8260B list and 1,4-dioxane. Soil gas samples analyzed by Method TO-15
* = Soil vapor monitoring well with sample collection in 1 liter Summa cannisters
** = Perchlorate analysis using EPA Method 332 is dependent on initial results < 2.0 micrograms per liter
*** = Water levels for private wells will be conducted at 218 E. Yearling and 520 E. Yearling