



AE Order Number Banner

Report Description

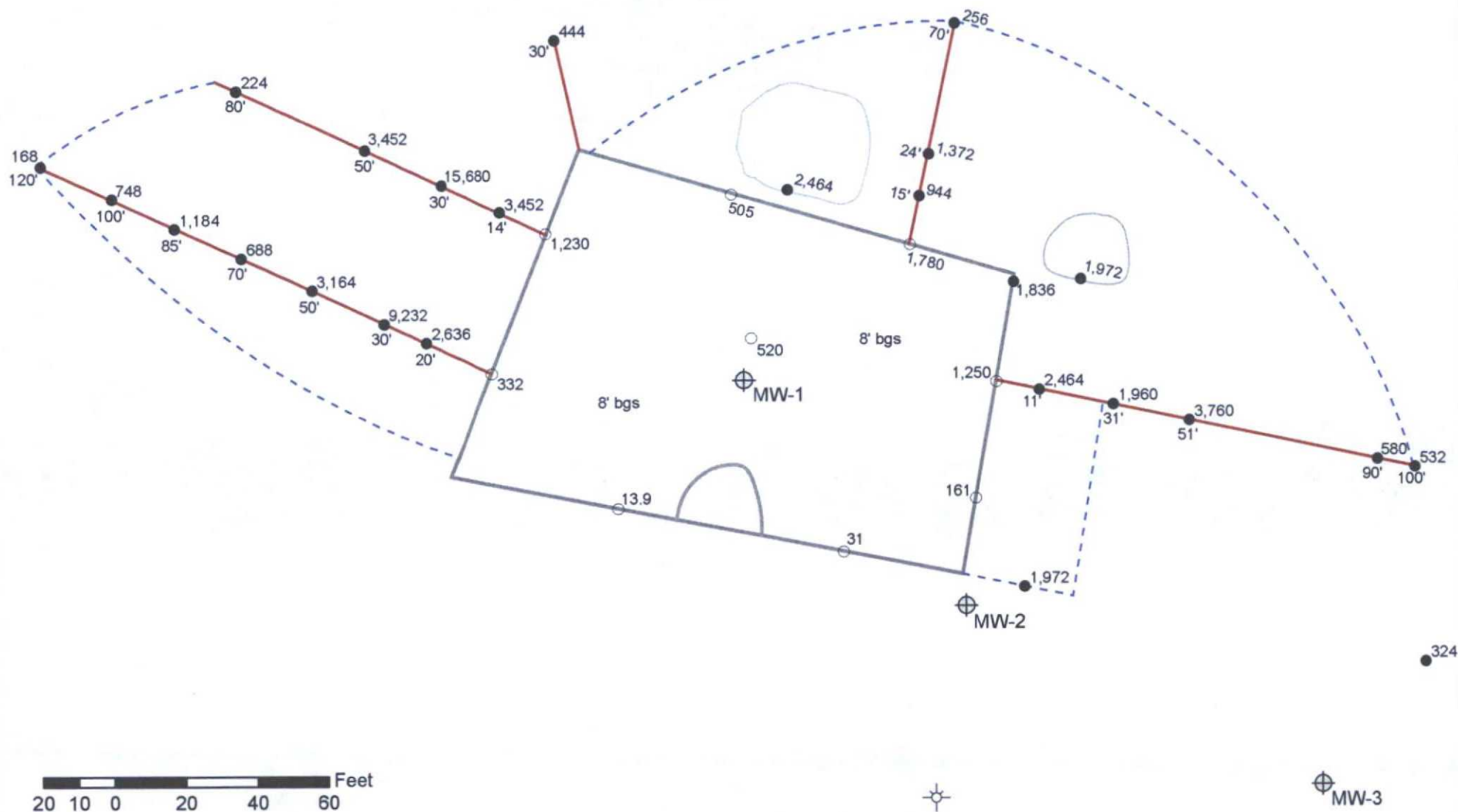
This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



App Number: pGVG0703762845

AP - 70

DAVID H ARRINGTON OIL & GAS INC



Note: Chloride concentrations are in mg/Kg.

Legend:

- - - Contamination Extent
- Trench
- Stockpile
- Drilling Pit
- ⊕ Monitor Well
- ⊙ Dry Hole Marker
- Sample (Field Screen)
- Sample (Laboratory)

Figure 2
Chloride Concentrations
Arrington Oil & Gas Operating, LLC
Mallon Drake 16 State #1
Lea County, New Mexico
NMOCD Reference No: AP-070

Basin Environmental Service Technologies, LLC

Drawn By: BJA	Checked By: BRB
February 14, 2011	1 inch = 40 feet

ARRINGTON OIL
PIT ON TOP OF
PIT -

TABLE 2

CONCENTRATIONS OF BENZENE, BTEX, CHLORIDES AND TOTAL DISSOLVED SOLIDS IN GROUNDWATER

ARRINGTON OIL & GAS OPERATING, LLC
MALLON DRAKE 16 STATE #1
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO: AP-070

SAMPLE LOCATION	SAMPLE DATE	METHODS: EPA SW 846-8021B, 5030						CHLORIDES (mg/L)	TDS (mg/L)
		BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	M,P-XYLENES (mg/L)	O-XYLENES (mg/L)	TOTAL BTEX (mg/L)		
MW-1	11/10/10	-	-	-	-	-	-	4,250	-
MW-2	11/10/10	-	-	-	-	-	-	34.1	-
MW-3	11/10/10	-	-	-	-	-	-	1,680	-
NMOCD CRITERIA		0.01	0.75	0.75	TOTAL XYLENES 0.62			250	10,000

730 12-22-06
297 1-24-07
763 1-24-07

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDES IN SOIL

ARRINGTON OIL & GAS OPERATING, LLC
MALLON DRAKE 16 STATE #1
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO: AP-070

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030						METHOD: 8015M			TOTAL	E 300
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	M,P - XYLENES (mg/Kg)	O-XYLENE (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)	TPH C ₆ -C ₃₅ (mg/Kg)	CHLORIDE (mg/Kg)
N SW-1 @ 6'	6 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	505
N SW-2 @ 4.5'	4.5 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	27.4	ND	27.4	1780
E SW-1 @ 5'	5 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1250
E SW-2 @ 5'	5 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	161
S SW-1 @ 6'	6 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31
S SW-2 @ 5'	5 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.9
W SW-1 @ 6'	6 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	332
W SW-2 @ 6'	6 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1230
Floor @ 10'	10 Feet	10/21/10	In-Situ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	520

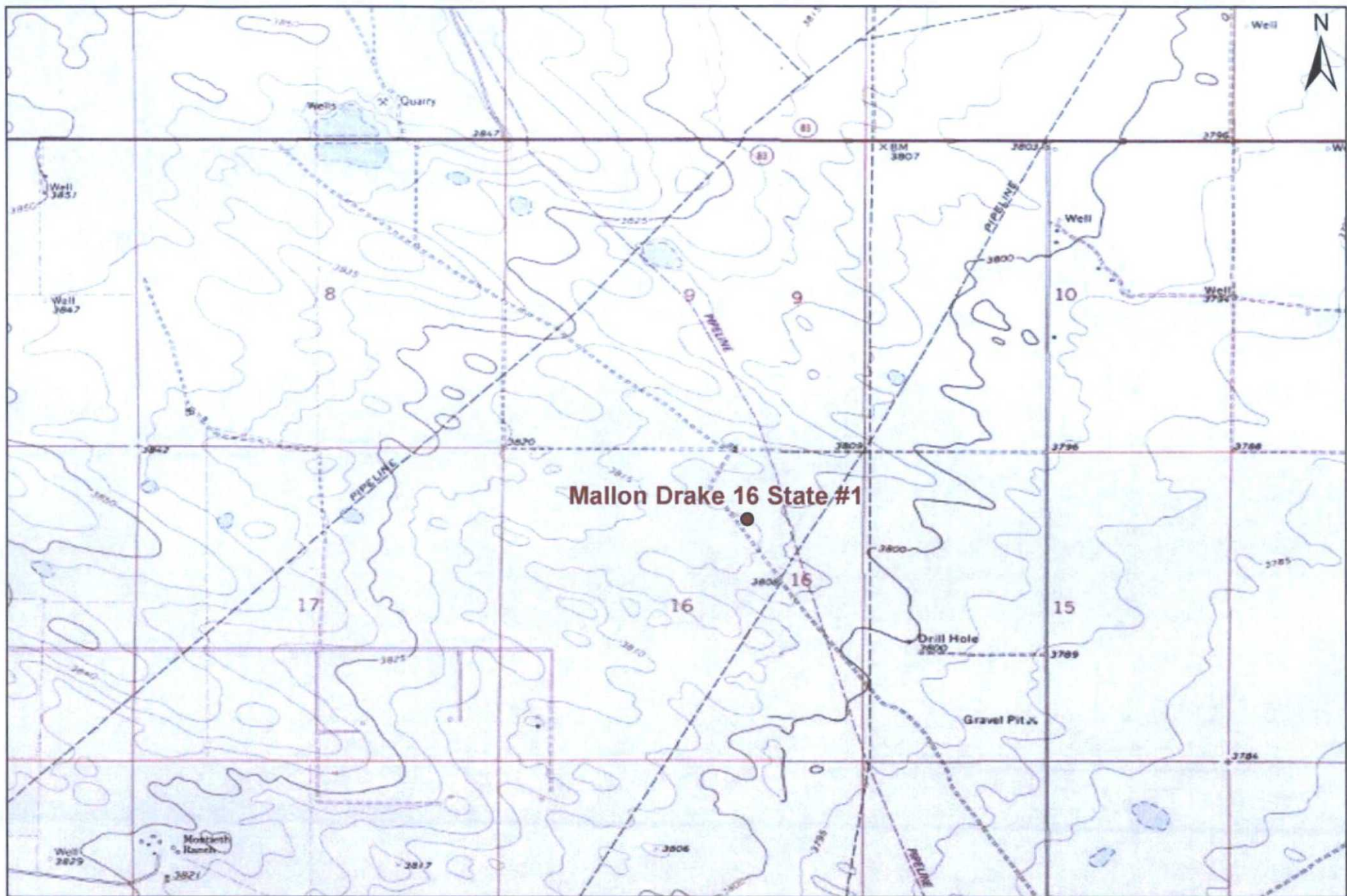
ND - "Non Detectable"; below laboratory Method Detection Limit.

TABLE 2

FIELD TEST RESULTS FOR CHLORIDE CONCENTRATIONS

ARRINGTON OIL & GAS OPERATING, LLC
MALLON DRAKE 16 STATE #1
LEA COUNTY, NEW MEXICO
NMOCD REFERENCE NO: AP-070

SAMPLE LOCATION	SAMPLE DEPTH (Below Grade Surface)	SAMPLE DATE	SOIL STATUS	Hach Quantab
				CHLORIDE (PPM)
North Stockpile	8'	1/17/2011	In-Situ	2,464
Northeast Stockpile	8'	1/17/2011	In-Situ	1,972
North Wall East Corner	8'	1/17/2011	In-Situ	2,464
North Wall East Trench - 15'	8'	1/17/2011	In-Situ	944
North Wall East Trench - 20'	8'	1/17/2011	In-Situ	632
North Wall East Trench - 24'	8'	1/17/2011	In-Situ	1,372
East Wall North Corner	8'	1/17/2011	In-Situ	1,836
East Wall North Trench - 11'	8'	1/17/2011	In-Situ	2,464
East Wall North Trench - 21'	8'	1/17/2011	In-Situ	1,960
East Wall North Trench - 31'	8'	1/17/2011	In-Situ	1,960
East Wall North Trench - 51'	8'	1/17/2011	In-Situ	3,760
West Wall North Trench - 14'	8'	1/17/2011	In-Situ	3,452
Northwest Corner Trench - 30'	8'	1/19/2011	In-Situ	444
North Wall East Trench - 70'	8'	1/19/2011	In-Situ	256
East Wall North Trench - 90'	8'	1/19/2011	In-Situ	580
East Wall North Trench - 100'	8'	1/19/2011	In-Situ	532
West Wall North Trench - 30'	8'	1/19/2011	In-Situ	15,680
West Wall North Trench - 50'	8'	1/19/2011	In-Situ	3,452
West Wall North Trench - 65'	8'	1/19/2011	In-Situ	2,636
West Wall North Trench - 80'	8'	1/19/2011	In-Situ	224
West Wall South Trench - 20'	8'	1/19/2011	In-Situ	2,636
West Wall South Trench - 30'	8'	1/19/2011	In-Situ	9,232
West Wall South Trench - 50'	8'	1/19/2011	In-Situ	3,164
West Wall South Trench - 70'	8'	1/19/2011	In-Situ	688
West Wall South Trench - 85'	8'	1/19/2011	In-Situ	1,184
West Wall South Trench - 100'	8'	1/19/2011	In-Situ	748
West Wall South Trench - 120'	8'	1/19/2011	In-Situ	168
Northeast Corner of Pad - Surface	0'	1/19/2011	In-Situ	220
Northeast Corner of Pad @ 3'	3'	1/19/2011	In-Situ	324
Northeast Corner of Pad - West Side	0'	1/19/2011	In-Situ	1,972
NMOCD Regulatory Standard				500



1,000 500 0 1,000 2,000
Distance in Feet

Figure 1
Site Location Map
Arrington Oil & Gas Operating, LLC
Mallon Drake 16 State #1
Lea County, New Mexico

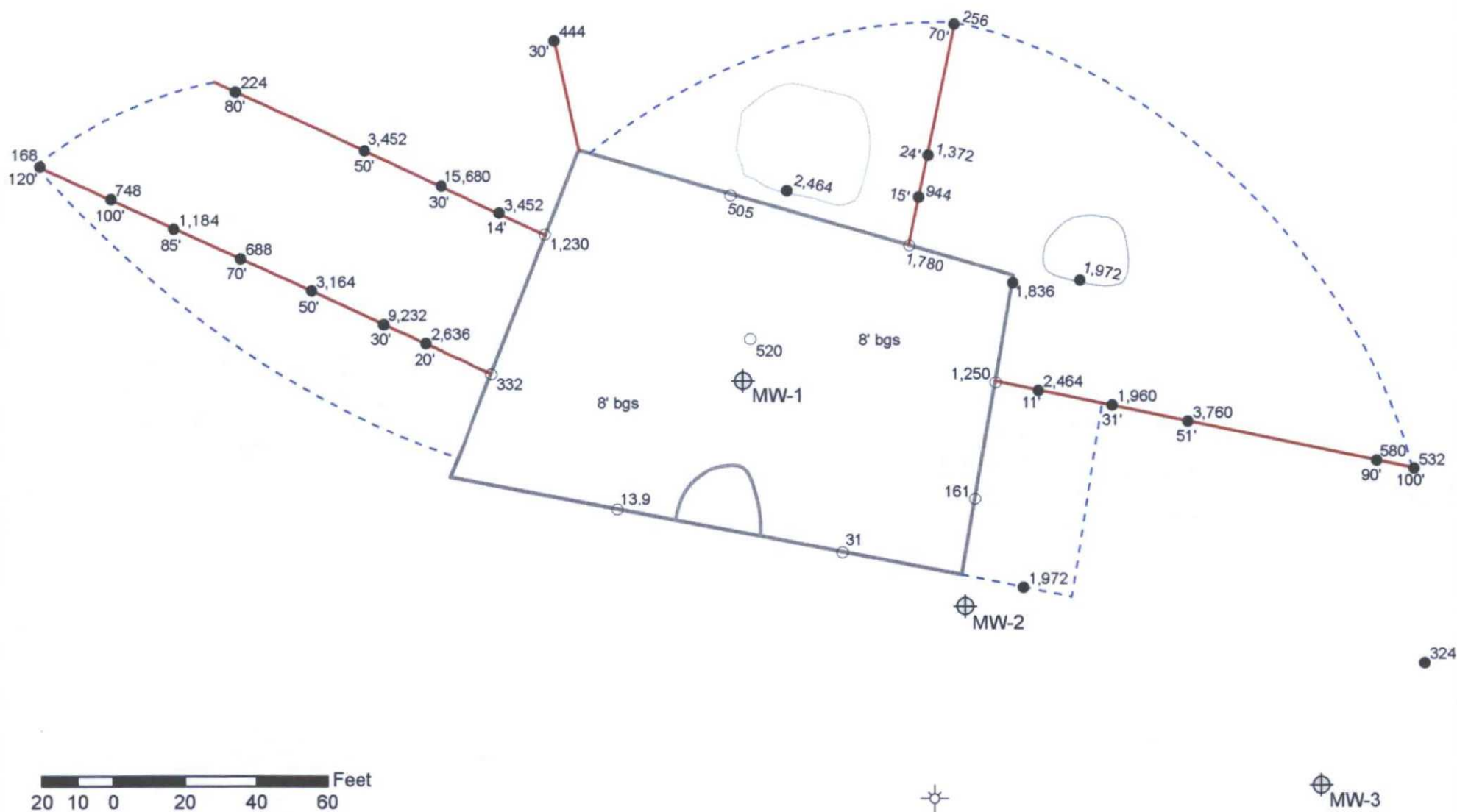
Basin Environmental Service Technologies, LLC

Drawn By: BJA

Checked By: BRB

February 15, 2011

Scale: 1" = 2000'



Legend:

- - - Contamination Extent
- Trench
- Stockpile
- Drilling Pit
- ⊕ Monitor Well
- ⊙ Dry Hole Marker
- Sample (Field Screen)
- Sample (Laboratory)

Figure 2
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February 14, 2011	1 inch = 40 feet



Mallon Drake 16 State #1

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Image U.S. Geological Survey

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Imagery Date: Nov 1, 1997

32°55'32.96" N 103°15'07.90" W elev 3812 ft

Eye alt 4734 ft



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Imagery Date: Aug 15, 2003

32°55'32.96" N 103°15'07.90" W elev 3812 ft

Eye alt 4734 ft



Mallon Drake 16 State #1

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Image USDA Farm Service Agency

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Imagery Date: May 9, 2009 32°55'32.96" N 103°15'07.90" W elev 3812 ft Eye alt 4734 ft